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U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU

ANNUAL
METEOROLOGICAL
SUMMARY

WITH COMPARATIVE DATA

1939

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UNIVERSITY OF ILLINOIS

PEORIA, ILLINOIS

COMPILED BY
M.L. FULLER

Printed at
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Peoria, Ill. January, 8, 1940

ANNUAL METEOROLOGICAL SUMMARY

PEORIA, ILL.

YEAR 1939

[Lat. 40° 43' N.; Long. 89° 36' W.

Elevations: Station 602, barometer 609 ft., above sea-level.

Thermometers 11, rain gage 4, anemometer 45 ft, above ground]

MONTH	TEMPERATURE					PRECIPITATION			Humidity Per cent	SUNSHINE	WIND			NUMBER OF DAYS																							
	Mean maximum	Mean minimum	Mean 1939	Highest	Date.	Lowest	Date.	Total 1939			Greatest in 24 hours	Date.	Snowfall	6:30 a. m., C.S.T.	12:30 p.m., C.S.T.	6:30 p. m., C.S.T.	Number of hours	Percent of possible	Cloudiness [scale 0 to 10]	Avg. miles per h'r.	Prevailing Dir.	Highest		Date.	Clear	Partly Cloudy	Cloudy	Precip. .01 or more	Snow T. or more	Thunderstorms	Light Fog	Dense Fog	Temperature				Degree-Days Heating
									Max	Min												32 or below	90 or above										32 or below	0 or below			
January	39.6	24.8	32.2	60	9	5	31	3.40	1.26	29-30	15.4	89	79	82	140	47	6.1	7.3	S.	24	ne.	30	10	7	14	13	10	2	15	2	9	0	26	0	1019	0	
February	36.6	18.4	27.5	56	19	4	10	2.88	1.83	9-10	3.3	86	71	78	142	48	5.3	8.5	nw.	25	sw.	10	10	7	11	10	5	2	3	2	10	0	27	0	1050	0	
March	50.9	31.1	41.0	82	23	13	17	3.24	1.67	11-12	T.	81	60	63	256	69	3.4	8.5	w.	24	ne.	12	19	6	6	8	0	2	2	0	2	0	18	0	749	0	
April	57.8	37.6	47.7	84	24	22	12	5.16	1.72	14-15	T.	83	59	61	210	53	5.2	8.0	w.	21	sw.	17	11	8	11	13	0	4	7	0	0	7	0	527	8		
May	77.7	54.6	66.2	93	24	37	3	4.48	1.20	8	0	78	49	53	362	81	1.2	6.0	S.	16	nw.	27	14	15	2	10	0	7	3	0	0	1	0	0	0	78	0
June	82.7	63.3	73.0	93	16	48	14	5.53	1.85	19	0	86	62	64	322	71	4.4	5.2	S.	16	w.	22	14	13	3	3	0	13	5	0	0	5	0	0	0	36	0
July	86.5	65.9	76.2	97	13	58	30	4.80	3.06	5-6	0	87	60	61	326	71	3.8	4.4	S.	16	ne.	5	20	5	6	7	0	12	2	0	0	0	0	0	0	59	0
August	84.8	61.7	73.2	92	1	54	22	2.38	82	6-7	0	92	55	66	306	72	3.6	4.1	ne.	16	w.	22	18	9	4	9	0	8	3	0	0	0	0	0	0	9	56
September	85.3	58.1	71.7	102	14	48	30	.85	.55	29	0	83	39	51	315	84	2.5	5.0	S.	16	S.	3	21	7	2	4	4	0	0	0	0	12	0	47	0		
October	70.1	44.1	57.1	89	6	29	14	3.80	3.09	26-27	0	82	46	58	249	72	3.5	6.0	S.	16	w.	23	16	11	4	11	0	6	5	0	0	0	2	0	305	0	
November	50.6	31.7	41.2	67	15	20	28	1.14	.73	9-10	0	86	57	68	162	55	5.1	5.6	S.	17	S.	9	11	8	11	9	0	1	7	1	0	0	19	0	715	0	
December	42.7	25.1	33.9	62	18	1	31	.61	.45	Oct. 26-27	8.0	86	64	73	169	59	4.8	6.5	S.	22	w.	Feb 10	14	7	10	5	3	0	6	4	8	0	24	1	965	0	
Year	63.8	43.0	53.4	102	Sep 14	— 1	Dec 31	38.27	3.09	Oct. 26-27	26.7	85	58	65	2959	65	4.1	6.3	S.	25	sw.		178	103	84	116	18	59	58	9	29	31	123	1	5455	168	

† Noon observations made at 12:30 p.m, starting July 1st.

* Degree-days: heating below 65°, cooling above 76°.

COMPARATIVE DATA AND EXTREMES

Month	Temperature						Precipitation						Relative humidity, per cent			Sunshine		Wind (True velocities)				Average number of days											
	Average daily maximum	Average daily minimum	Normal	Absolute highest	Year	Absolute lowest	Year	Normal	Greatest in 24 hours	Year	Average snowfall	Greatest snowfall in 24 hours	Year	8 a. m.	Noon—local time	8 p. m.	Total hours	Per cent	Average hourly velocity	Prevailing direction	Highest velocity	Direction highest velocity	Year	Clear	Partly cloudy	Cloudy	Rain, .01 or more	Snow (trace or more)	Thunderstorms	Dense fog	Max. temp. 90° or above	Minimum temp. 32° or below	Minimum temp. 0° or below
No. Years	54	54	50	84	84	84	84	50	55	55	55	55	55	35	22	34	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
January.	33.1	17.8	23.1	71	1909	-27	1884	1.78	2.90	1897	6.3	13.6	1927	88	73	80	146	49	8.7	S	42	S	1906	11	7	13	9	10	5	2	0	28	4
February.	39.4	19.8	25.9	74	1932	-26	1905	2.01	2.89	1887	5.2	18.0	1900	87	69	76	165	55	9.0	NW	37	SW	1918	10	7	11	8	9	1	0	0	24	2
March...	47.9	30.4	37.0	87	1907	-6	1913	2.73	3.29	1859	3.5	9.0	1926	84	62	68	213	57	9.4	S	41	SW	1918	12	4	11	10	7	3	1	0	19	5
April....	61.8	41.5	50.9	92	1899	14	1920	3.38	2.69	1905	0.8	7.0	1920	79	57	61	239	60	9.2	S	39	W	1909	11	9	10	12	2	5	5	0	6	0
May.....	73.5	51.9	61.7	104	1934	25	1506	4.06	5.52	1927	T	0.1	1923	77	59	60	295	65	7.7	S	37	W	1905	12	11	8	12	5	7	1	0	0	0
June.....	83.2	61.4	70.9	105	1936	35	1859	3.77	4.74	1911	0	0	....	79	55	60	329	73	6.7	S	38	NW	1924	14	11	5	10	0	10	8	0	0	0
July.....	88.2	65.4	75.4	113	1936	46	1911	3.58	4.49	1895	0	0	....	80	52	58	356	78	5.9	S	40	W	1906	17	11	3	9	0	0	12	0	0	0
August...	85.5	63.2	72.5	106	1936	41	1915	4.03	4.49	1926	0	0	....	84	55	65	308	72	6.2	S	46	N	1907	15	11	5	9	0	8	8	0	0	0
Sept.	78.2	55.9	64.3	104	1899	26	1899	2.29	3.09	1888	0.1	0	....	87	56	69	249	67	6.9	S	38	N	1907	15	8	7	10	9	9	4	0	0	0
October..	65.2	43.8	52.0	92	1923	7	1925	2.29	3.09	1889	0.1	3.3	1929	87	66	70	211	61	6.9	S	38	W	1905	11	6	10	8	1	6	2	0	5	0
Nov.....	49.1	32.3	37.5	81	1927	-1	1857	2.27	3.00	1858	1.3	9.1	1926	86	66	72	156	53	8.3	S	40	W	1905	11	8	11	9	4	1	1	0	16	5
Dec.....	36.7	22.5	28.1	71	1875	-21	1924	1.77	2.60	1895	4.1	9.2	1909	88	73	81	131	45	8.2	S	32	W	1927	9	8	14	9	3	0	2	0	26	2
Year.....	61.8	42.2	49.9	113	July 1936	-27	Jan. 1884	34.83	5.52	May 1927	21.3	18.0	Feb 1900	84	61	68	2798	61	7.7	S	46	N	Aug 1907	152	105	108	114	41	51	9	31	124	8

7 o'clock observations made at 6:30 beginning 1937.

I Also other dates

5 Less than one half.

7 o'clock observations made at 6:30 beginning 1937.

1 Also other dates

5 Less than one half.

70.9 1930 63.61. Sep. 1930 63.61. 111.5 Z

**Monthly and Annual Precipitation
Peoria, Illinois**

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept.	Oct	Nov	Dec	An'l
1855..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.76	.....
1856..	0.80	1.03	0.25	0.86	4.08	1.50	2.83	1.39	0.78	1.66	4.00	6.13	25.31
1857..	0.37	5.33	3.84	1.39	2.80	2.77	1.40	5.61	2.16	2.01	1.35	1.50	30.53
1858..	1.48	1.95	3.28	6.25	10.64	5.95	5.75	3.24	2.96	3.24	4.85	3.67	53.26
1859..	1.50	1.42	5.83	2.60	3.17	2.18	0.67	4.14	2.84	2.15	2.40	1.23	30.13
1860..	1.86	2.40	1.13	1.64	2.00	4.95	8.87	2.39	2.11	0.70	3.13	3.08	34.26
1861..	1.25	2.46	3.96	4.95	2.19	2.31	2.31	2.78	3.72	2.33	1.09	0.94	30.29
1862..	4.27	0.70	2.71	5.03	1.46	3.67	7.74	9.04	5.09	1.61	1.81	5.20	48.33
1863..	2.83	3.20	2.60	1.52	2.97	0.45	4.82	2.24	2.51	3.92	0.71	4.49	32.26
1864..	1.42	0.41	2.20	4.81	1.88	2.55	2.92	1.56	4.71	1.53	3.82	3.06	30.87
1865..	0.22	4.01	3.57	4.27	2.34	1.86	5.77	3.61	3.31	1.67	0.31	1.06	37.00
1866..	3.21	1.10	2.54	2.65	2.57	2.61	5.17	3.97	6.50	2.87	0.51	2.05	35.75
1867..	1.36	2.88	1.74	1.57	4.40	2.92	2.65	2.26	0.60	1.10	1.93	1.21	24.62
1868..	0.77	0.75	5.38	3.18	7.85	1.43	1.47	2.74	4.46	1.41	4.50	1.81	35.75
1869..	0.99	2.62	1.71	3.59	6.09	8.35	7.35	3.39	0.74	1.53	3.13	2.63	42.12
1870..	2.05	0.33	4.37	0.45	1.62	0.75	0.68	3.26	3.56	4.27	1.21	1.12	23.67
1871..	2.45	1.62	3.24	2.58	1.93	3.47	4.03	4.95	0.65	3.37	2.09	2.04	32.42
1872..	0.20	0.69	2.53	2.95	2.38	9.76	7.80	4.54	4.13	0.80	2.00	1.07	38.85
1873..	3.47	1.29	1.30	4.76	4.78	2.96	4.25	1.25	3.65	2.26	1.46	7.15	38.58
1874..	3.04	1.45	1.11	2.90	2.51	1.95	1.46	5.60	1.15	1.00	2.20	0.67	25.04
1875..	0.32	2.20	2.05	2.00	4.23	3.00	8.22	1.02	9.61	3.46	0.71	2.39	39.27
1876..	2.63	2.00	4.70	2.66	3.94	6.17	5.54	3.14	4.51	4.86	2.63	0.28	43.06
1877..	0.92	0.06	3.32	2.86	2.57	9.43	3.01	2.04	2.83	5.68	3.65	3.45	39.82
1878..	0.50	2.25	2.10	3.75	4.45	3.94	2.58	4.42	0.97	3.96	0.91	2.08	31.91
1879..	1.05	0.97	1.80	2.95	0.93	3.23	3.42	1.88	3.72	2.17	4.93	1.92	28.97
1880..	3.38	3.95	3.30	5.94	6.73	2.32	3.17	3.38	3.09	1.75	1.92	0.96	39.89
1881..	0.52	3.51	3.52	1.62	3.60	7.20	2.43	1.38	4.05	5.56	4.26	3.50	41.15
1882..	1.27	3.21	3.12	2.41	6.34	11.18	2.91	1.92	1.43	3.76	2.08	1.76	41.39
1883..	1.31	4.14	0.77	6.18	6.54	4.39	3.57	0.57	2.93	3.57	4.19	1.37	39.53
1884..	0.70	3.18	2.17	2.62	5.50	3.87	3.67	4.13	5.76	4.80	2.19	3.21	41.80
1885..	2.63	2.24	0.87	4.44	1.70	4.07	3.73	2.64	5.28	2.32	1.04	2.44	33.40
1886..	2.41	1.86	2.25	2.75	2.90	3.67	0.47	3.30	4.68	1.81	1.34	0.89	23.33
1887..	1.10	5.45	0.94	1.53	1.24	1.53	2.85	2.72	2.53	2.14	1.62	3.65	27.30
1888..	1.87	1.66	4.03	1.18	6.72	1.84	6.43	2.30	4.79	2.29	2.67	2.39	38.22
1889..	1.70	0.84	1.50	2.79	3.92	6.48	7.64	1.23	2.61	2.28	2.91	1.33	35.23
1890..	2.80	1.36	2.73	2.33	2.74	2.42	0.72	2.39	2.12	3.45	1.79	0.41	25.26
1891..	1.69	1.90	2.68	3.64	1.97	3.31	2.82	5.71	2.00	0.71	4.08	2.40	32.91
1892..	1.25	1.78	2.45	4.54	7.70	6.05	3.03	0.73	2.35	1.20	2.72	1.75	35.60
1893..	1.15	2.92	3.01	7.86	4.65	1.82	2.48	0.44	3.02	0.70	2.21	1.74	32.00
1894..	2.60	1.48	3.06	2.22	3.58	4.18	1.60	2.50	4.42	1.45	2.92	1.58	30.99
1895..	1.32	0.37	1.02	2.89	1.84	1.67	8.72	2.27	4.92	0.67	4.17	5.86	35.72
1896..	1.30	1.95	1.05	4.47	5.74	2.23	7.02	4.69	4.86	0.23	2.90	0.40	36.14
1897..	5.39	1.19	4.70	2.87	1.29	2.11	4.65	1.02	0.93	0.04	3.48	1.16	28.83
1898..	4.08	2.59	5.74	3.02	5.54	3.37	0.47	3.26	6.05	3.00	2.03	0.93	40.08
1899..	0.72	1.96	2.97	1.36	6.03	2.60	1.69	1.27	5.24	2.78	2.25	2.12	30.99
1900..	1.92	5.64	1.42	1.09	5.54	1.44	2.45	5.39	2.94	2.90	1.87	0.39	32.99
1901..	1.98	1.24	4.31	0.81	1.50	4.32	3.97	1.29	2.64	0.90	0.80	2.26	26.02
1902..	0.62	1.41	2.71	2.29	2.99	9.60	7.30	7.42	6.84	3.78	2.83	1.54	49.33
1903..	0.89	1.70	3.66	5.15	4.22	2.39	4.91	7.22	5.78	2.13	0.85	0.95	39.85
1904..	1.87	1.29	4.42	3.48	4.06	2.44	5.53	4.13	6.67	0.10	0.12	1.33	35.49
1905..	1.15	1.45	2.00	3.99	4.53	5.13	4.24	1.36	1.78	2.77	2.45	1.60	32.43
1906..	1.70	1.85	2.55	2.77	2.88	3.24	2.43	1.59	4.92	1.00	2.42	1.65	29.05
1907..	5.39	0.14	2.34	2.82	2.08	3.99	4.89	6.60	2.94	0.35	1.68	1.66	34.88
1908..	0.59	3.98	2.50	4.08	7.76	4.09	3.94	2.78	0.82	0.71	1.89	0.82	33.96
1909..	1.55	3.67	1.81	7.17	3.72	3.56	4.57	0.79	3.68	3.59	5.53	2.50	42.14
1910..	1.97	1.10	0.52	3.56	4.49	0.78	3.23	0.68	3.12	1.69	0.79	1.25	22.13
1911..	2.37	2.39	2.64	2.69	1.03	6.64	2.58	1.73	12.36	2.65	3.01	2.13	42.16
1912..	0.35	1.21	2.03	6.88	4.39	1.86	5.04	1.67	3.54	4.03	1.56	1.13	33.69
1913..	2.18	3.00	3.46	3.54	1.85	2.50	0.46	2.87	2.53	3.11	2.77	0.74	29.06
1914..	1.93	1.36	1.60	2.10	2.28	2.45	0.82	2.40	5.55	2.15	0.20	1.81	24.65
1915..	1.89	2.71	0.67	1.60	11.43	2.03	6.91	4.78	4.88	0.55	2.29	1.66	41.51
1916..	5.95	0.29	2.33	1.60	7.51	2.55	1.14	6.03	3.73	2.93	1.88	1.75	37.69
1917..	1.86	0.27	2.26	4.54	2.40	7.43	1.92	3.36	3.14	2.23	0.07	0.63	30.11
1918..	1.58	1.64	0.91	3.70	3.02	4.69	3.46	5.88	1.67	2.97	3.18	2.80	35.50
1919..	0.07	2.32	4.52	2.35	3.79	3.96	3.09	4.73	3.48	2.12	2.91	0.30	33.64
1920..	0.93	0.27	5.84	6.12	3.03	2.18	1.56	1.87	1.84	1.93	1.22	1.87	28.66
1921..	1.39	0.29	4.89	6.36	2.13	2.17	3.95	3.86	4.86	2.97	3.43	2.91	39.21
1922..	1.69	1.98	5.09	3.62	4.60	0.99	3.06	0.72	2.71	2.02	3.67	1.38	31.53
1923..	1.10	0.83	4.08	1.95	5.15	2.09	1.35	2.84	5.28	3.85	1.37	2.21	32.10
1934..	1.72	1.64	2.28	2.13	1.91	3.08	5.59	7.15	3.74	1.27	0.52	2.40	38.43
1925..	0.43	1.99	1.58	1.68	1.53	3.15	3.93	4.27	4.99	2.49	2.70	1.12	29.91
1926..	1.39	2.42	2.35	2.60	2.18	5.63	5.94	6.79	11.55	2.62	5.41	1.12	50.00
1927..	1.78	2.85	4.55	4.87	9.22	5.71	4.94	1.45	5.82	4.20	3.38	2.91	51.66
1928..	0.36	1.73	0.96	2.84	3.21	6.60	4.35	3.62	3.18	3.66	3.97	2.53	37.01
1929..	3.98	0.58	4.57	4.56	5.03	4.44	5.76	3.02	1.04	3.89	1.72	1.07	39.66
1930..	2.81	2.10	1.55	3.58	1.07	2.53	1.02	1.56	1.31	3.14	3.07	0.29	24.03
1931..	0.48	0.83	2.50	2.23	5.14	2.29	5.91	2.49	4.92	3.15	5.55	2.26	37.75
1932..	2.51	1.40	2.51	1.90	3.61	4.75	3.41	3.14	1.78	3.18	0.94	4.46	33.68
1933..	1.69	1.33	4.70	3.05	7.97	1.15	1.93	2.66	5.92	2.23	0.26	1.18	34.07
1934..	1.05	0.77	1.76	1.13	0.47	2.82	5.44	2.30	6.57	1.97	4.81	1.34	30.43
1935..	1.93	2.83	3.32	2.91	8.58	6.62	2.61	0.98	3.33	1.59	4.03	1.39	40.15
1936..	1.79	1.63	1.80	1.64	1.72	0.45	1.24	2.27	10.58	3.35	1.18	3.26	30.91
1937..	2.86	2.46	1.02	4.42	3.22	4.87	2.32	1.55	1.14	2.69	1.23	2.06	29.89
1938..	4.32	2.21	4.42	3.80	5.72	6.76	6.34	3.01	2.12	0.84	1.65	1.43	42.62
1939..	3.40	2.88	3.24	5.16	4.48	5.53	4.80	2.38	1.85	3.80	1.14	1.61	38.27
Av'g.	1.83	1.93	2.75	3.23	3.95	3.79	3.80	3.08	3.83	2.40	2.35	2.03	34.93

Note: May was driest in 1934 (the table to 1931 is a plate and boldface entries could not be changed.)
(WBO.; 1-8-40: 400)

Peoria, Illinois
Monthly and Annual Average Temperatures, 84 Years

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept.	Oct	Nov	Dec	An'l
.....													
1855..												29.0	
1856..	15.4	22.0	33.4	55.1	59.4	73.4	75.1	68.2	62.5	55.2	36.5	22.2	48.2
1857..	12.2	34.9	31.2	38.5	56.3	67.5	74.4	71.2	66.4	50.4	34.2	34.1	47.5
1858..	34.4	20.4	40.5	49.4	56.5	72.3	74.5	72.8	64.5	51.1	35.1	31.3	50.2
1859..	27.2	32.1	43.8	46.4	64.5	68.3	75.2	71.5	62.9	49.3	42.4	19.4	50.2
1860..	25.2	31.6	43.6	52.3	66.4	72.4	74.1	72.5	63.7	53.3	36.4	23.6	51.3
1861..	23.2	33.7	38.6	51.7	57.4	72.3	72.2	74.1	63.5	53.4	39.2	33.4	51.1
1862..	21.1	23.2	36.2	47.2	62.6	68.7	75.4	74.6	67.3	53.2	36.0	34.3	50.0
1863..	32.5	31.2	35.4	51.2	62.8	66.6	72.1	72.4	62.3	45.1	40.2	31.1	50.2
1864..	23.2	33.4	37.3	46.5	63.3	71.1	74.4	72.3	64.4	48.0	39.2	25.4	49.1
1865..	23.4	35.2	39.1	48.6	61.1	72.0	68.2	70.4	70.2	53.4	41.0	25.0	50.5
1866..	24.2	25.3	33.2	53.7	58.0	67.6	75.1	67.4	57.9	52.6	41.1	27.0	48.9
1867..	19.0	31.9	28.5	48.9	53.0	72.1	73.4	73.1	66.8	53.6	43.0	28.1	49.3
1868..	18.0	26.9	44.3	45.0	59.6	69.2	80.0	68.0	59.0	50.2	40.0	24.4	48.9
1869..	33.1	31.4	31.4	46.8	59.0	66.0	70.0	74.0	64.0	44.0	34.6	29.4	48.6
1870..	27.2	30.3	34.4	53.0	65.6	72.1	78.0	71.5	68.0	54.0	42.1	26.2	51.8
1871..	28.5	32.0	44.6	54.8	64.6	72.0	73.5	73.0	63.3	56.0	35.1	23.2	51.7
1872..	25.3	28.2	33.4	52.0	62.4	73.2	76.3	76.0	64.3	51.1	32.0	19.4	49.6
1873..	17.9	24.8	37.4	47.6	61.2	77.0	75.1	76.5	62.6	48.0	34.6	31.0	49.6
1874..	27.2	30.0	37.6	42.7	65.0	75.2	78.3	76.0	67.4	53.8	37.6	29.6	51.5
1875..	13.2	14.0	31.6	46.5	61.0	70.1	74.0	72.2	63.0	48.4	35.0	37.1	46.9
1876..	32.5	33.2	34.2	52.6	64.8	69.0	76.6	74.0	63.6	49.8	37.2	17.8	50.3
1877..	20.0	37.3	32.3	52.0	62.8	69.7	76.6	74.0	68.4	56.0	38.6	44.3	52.6
1878..	31.5	37.3	49.8	56.0	60.0	69.4	80.0	76.6	67.2	51.8	41.8	21.4	53.4
1879..	19.6	22.8	41.5	52.1	65.2	71.0	79.0	76.0	62.4	61.1	42.0	29.0	51.4
1880..	40.2	35.0	39.1	53.0	68.3	74.3	76.6	76.7	63.4	49.8	30.2	22.4	52.5
1881..	17.1	23.7	32.2	45.8	59.6	71.0	78.1	73.4	71.2	56.6	39.9	37.3	52.0
1882..	28.4	40.3	42.0	52.5	57.2	71.0	72.0	73.6	64.2	57.0	42.3	27.1	52.4
1883..	15.0	23.7	35.1	53.1	58.3	70.3	75.1	71.0	62.3	51.0	42.5	31.4	49.1
1884..	17.7	29.2	37.6	51.2	62.4	72.0	74.2	73.0	71.4	57.5	41.8	26.8	51.2
1885..	16.8	15.9	34.2	51.2	62.0	71.0	79.2	72.1	65.4	50.6	42.0	30.8	48.8
1886..	13.9	26.4	37.2	51.7	64.7	71.1	77.1	75.7	66.8	55.4	36.6	21.0	50.3
1887..	17.9	29.7	35.9	54.4	63.1	74.7	80.1	73.6	65.6	47.9	38.1	26.9	51.1
1888..	15.5	25.4	34.1	52.4	58.5	71.4	76.6	69.8	58.9	48.3	38.9	31.3	48.4
1889..	27.5	22.6	40.1	51.9	59.6	70.3	73.5	70.3	61.9	47.0	36.3	40.5	50.1
1890..	29.8	32.7	32.0	52.8	58.4	75.9	76.1	70.2	61.1	51.7	41.1	30.8	51.0
1891..	29.2	23.7	31.3	53.1	58.9	70.6	69.6	69.1	67.5	51.4	34.7	35.5	50.0
1892..	13.4	32.0	34.4	48.0	57.4	71.2	73.8	72.8	62.9	55.5	34.5	25.5	43.9
1893..	13.3	23.0	33.4	48.8	53.2	72.7	77.9	71.0	66.0	53.0	36.2	27.4	48.7
1894..	27.5	24.2	44.0	56.4	60.9	74.2	75.4	72.0	65.0	52.3	34.7	31.5	51.5
1895..	17.8	17.2	35.8	52.9	63.4	74.5	72.7	73.2	67.1	45.1	37.0	30.3	48.9
1896..	28.1	27.4	34.8	58.1	68.5	70.9	74.5	72.8	69.7	49.0	38.0	33.8	51.4
1897..	22.2	29.3	37.0	49.2	58.9	70.9	76.1	69.4	69.0	57.9	38.6	24.5	50.2
1898..	28.5	29.1	41.0	49.1	60.5	73.3	76.0	72.6	68.0	50.2	36.2	25.2	50.8
1899..	24.4	18.1	31.1	53.0	63.3	72.7	74.1	71.9	62.6	57.2	44.7	26.8	50.2
1900..	28.6	21.7	31.7	51.8	63.6	70.7	74.7	78.1	66.2	59.4	38.2	29.3	51.2
1901..	26.8	20.8	36.0	49.9	61.1	74.1	81.1	73.7	64.6	54.3	36.8	24.6	50.3
1902..	26.1	21.1	41.4	50.0	66.6	67.8	74.4	70.3	61.5	55.1	47.6	27.4	50.8
1903..	25.1	26.7	44.1	50.0	65.2	67.1	75.9	71.4	64.5	52.7	35.9	21.2	50.1
1904..	18.2	20.0	36.4	45.4	62.9	70.4	72.9	69.1	65.4	51.8	41.3	28.0	48.5
1905..	18.8	15.2	43.9	50.5	61.6	71.2	72.0	74.4	67.6	52.3	40.0	29.6	50.0
1906..	30.2	27.0	29.3	54.2	63.0	69.3	72.6	75.4	69.7	52.8	39.5	30.6	51.1
1907..	28.0	28.3	45.6	43.4	55.1	66.9	74.2	71.9	64.4	51.4	33.3	32.8	50.0
1908..	26.8	27.0	42.3	51.0	62.0	69.4	74.2	72.6	69.0	51.1	41.8	29.4	51.6
1909..	26.3	31.8	36.8	48.4	59.2	71.2	71.4	77.0	64.0	49.8	43.0	19.2	50.3
1910..	24.3	23.8	49.8	52.0	56.4	69.8	75.4	72.2	65.4	56.6	35.2	25.4	50.5
1911..	27.4	32.2	40.2	48.4	68.2	75.5	75.0	72.0	67.8	51.4	33.3	33.0	52.0
1912..	11.0	20.8	23.4	51.5	64.2	68.4	74.8	72.4	67.0	54.8	41.8	32.7	49.0
1913..	27.8	24.4	35.4	51.7	62.4	73.2	75.5	77.8	66.8	52.0	47.2	35.7	52.7
1914..	32.2	19.3	36.8	51.2	65.0	74.2	78.8	75.4	66.2	57.2	43.4	20.8	51.7
1915..	21.0	35.4	34.1	58.8	58.6	67.8	71.9	67.2	67.8	55.6	43.8	27.3	50.8
1916..	27.2	24.4	37.4	49.8	61.4	65.8	81.0	76.0	63.6	54.2	42.4	25.2	50.7
1917..	24.4	20.8	40.0	47.4	55.6	67.7	75.0	70.8	61.7	44.2	41.8	19.8	47.6
1918..	10.4	27.9	45.6	45.8	66.4	71.4	72.8	77.5	58.2	56.2	41.9	36.6	50.9
1919..	29.2	30.8	40.8	51.3	58.2	74.8	78.4	71.9	68.2	55.8	37.9	20.6	51.5
1920..	18.6	27.6	41.5	44.2	60.8	72.0	73.6	72.2	68.5	60.2	38.6	30.8	50.7
1921..	32.2	34.4	47.3	54.3	65.1	76.8	79.8	73.8	70.0	55.6	39.9	32.2	55.1
1922..	23.8	29.9	41.2	52.5	65.6	73.2	74.7	74.5	69.6	58.0	43.2	28.8	52.9
1923..	31.8	23.2	34.2	49.4	61.0	73.0	77.6	73.4	65.4	50.4	42.2	38.0	51.6
1924..	19.0	28.0	34.8	53.5	55.5	69.2	71.0	72.7	60.4	59.2	41.2	21.8	48.9
1925..	23.5	33.1	41.1	57.8	57.8	73.4	74.9	73.9	71.6	43.4	37.7	24.8	51.1
1926..	26.9	33.4	32.0	44.0	64.0	67.2	75.8	74.4	65.6	52.5	36.2	26.8	49.9
1927..	23.4	36.1	43.2	50.8	60.0	67.2	73.7	63.5	70.0	58.0	43.3	25.9	51.7
1928..	26.5	32.3	40.4	47.6	63.3	66.0	75.6	74.8	61.2	57.0	41.7	32.0	51.5
1929..	17.8	21.2	45.4	53.6	59.4	68.6	75.3	71.6	65.2	53.0	35.8	23.2	49.6
1930..	17.0	38.4	38.8	55.0	63.3	71.6	78.2	75.1	69.8	53.0	42.4	29.8	52.8
1931..	32.6	36.7	36.7	52.6	58.2	75.7	79.2	74.0	73.0	59.2	50.2	38.6	55.8
1932..	33.2	36.8	36.8	51.4	63.7	73.4	76.7	71.2	64.8	52.8	36.0	27.3	51.9
1933..	37.6	26.8	39.4	50.9	62.8	73.9	78.5	73.0	72.6	51.8	39.6	32.6	53.7
1934..	31.7	23.8	34.1	51.6	65.7	79.2	81.0	74.4	63.8	57.4	49.0	26.0	53.1
1935..	26.2	31.4	44.3	48.4	58.8	67.4	79.2	74.8	65.8	54.4	38.6	23.2	50.8
1936..	17.2	14.8	41.9	48.2	67.0	72.0	84.3	80.3	70.5	54.2	37.8	33.8	51.8
1937..	23.8	27.8	35.2	49.7	63.2	70.8	75.8	78.3	65.8	52.2	36.7	26.8	50.6
1938..	23.2	36.2	47.4	53.3	62.2	69.9	76.5	77.2	68.1	60.3	43.0	30.0	54.2
1939..	32.2	27.5	41.0	47.7	66.2	73.0	76.2	73.2	71.7	57.1	41.2	33.9	53.4
Mean	24.3	27.8	33.0	50.6	61.8	71.3	75.6	73.2	65.6	53.1	39.4	28.5	51.2

SUNSHINE AND PRECIPITATION, 1839

Day	Daily Sunshine												Daily Precipitation											
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct.	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct.	Nov	Dec
1.....	100	0	100	95	100	59	97	84	85	97	64	0	.....	.17	.....	.04	.....	.08	.....	.17	T.	.....	.....	.14
2.....	71	73	100	48	100	77	89	43	69	97	70	0	.....	.....	.....	.08	.....	.02	.....	.....	T.	.....	T.	.01
3.....	100	77	77	87	100	85	87	90	53	100	40	23	.....	.....	.....	.....	.....	.07	.....	.....	.....	.....	.....	.....
4.....	0	89	75	90	100	100	72	100	100	72	89	46	.07	.....	.....	.25	.69	.04	.35	.....	.....	T.	.....	.....
5.....	72	53	0	0	99	100	46	96	92	77	13	87	.77	.....	.12	T.	T.	.04	2.55	.23	.....	T.	.....	.....
6.....	100	7	45	63	100	91	52	32	100	100	69	100	.....	.....	.....	.04	.11	.08	.....	.59	.....	.07	.01	.....
7.....	80	65	60	69	12	85	96	26	98	46	67	95	.....	.....	.....	T.	T.	.34	.....	.31	.....	.02	.....	.....
8.....	0	0	55	57	100	89	91	18	88	51	49	100	.50	1.81	.19	.56	T.	.86	.....	.....	.....	.02	.72	.....
9.....	57	86	4	4	73	11	100	84	100	8	100	100	.....	.02	.....	.....	.09	.26	.....	.....	.....	.....	.....	.....
10.....	82	100	0	34	92	30	100	83	39	100	97	92	.....	.....	.52	T.	.....	.09	.....	.14	.....	.....	T.	.....
11.....	81	96	37	100	83	45	97	59	92	100	100	3	.05	.....	.....	T.	T.	.05	.....	.19	.....	T.	.....	.....
12.....	0	96	89	80	94	23	91	88	100	55	100	71	.10	.....	.....	.93	.97	.....	.....	.....	.....	.....	.....	.....
13.....	0	0	100	5	76	81	100	98	99	98	100	64	.04	T.	.....	.32	.....	T.	.....	T.	.....	.....	.....	.....
14.....	12	75	96	0	65	61	8	53	97	83	100	71	.08	.08	T.	.45	.....	.....	.....	.20	.....	T.	.....	.....
15.....	23	10	83	0	86	100	23	45	100	100	59	99	.....	.15	.....	.24	.....	.....	.....	.....	.....	.....	.....	.....
16.....	9	98	100	2	97	95	7	0	100	100	0	100	0	.....	.....	.19	T.	.85	.....	.03	.....	.....	.....	.....
17.....	20	44	100	2	97	93	17	71	100	65	0	10	T.	.12	.....	.....	.....	.....	.....	.03	.....	.09	T.	.....
18.....	45	0	100	9	88	46	83	66	89	73	18	20	.....	.....	.....	.....	.....	.06	.....	.....	.....	.....	T.	.....
19.....	79	8	100	24	58	51	93	41	100	79	8	100	.....	.....	.....	T.	.51	.35	.....	.....	.....	.....	.....	.....
20.....	36	32	100	22	75	79	54	79	100	94	61	83	.....	.....	.....	.....	T.	.63	.....	.52	.....	.....	.....	.....
21.....	100	91	100	100	90	100	66	100	61	99	28	0	.17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22.....	4	5	100	95	100	100	66	100	61	99	0	0	.....	.....	.....	.....	.....	.....	.....	.....	T.	.....	.....	.....
23.....	89	100	85	100	100	100	83	99	68	33	0	100	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
24.....	53	9	62	85	80	94	48	87	82	67	3	88	T.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
25.....	24	8	2	85	69	49	80	100	22	64	18	0	T.	.06	.55	.40	.16	.40	.21	.....	.02	.....	.....	.....
26.....	83	36	85	28	53	41	90	92	100	0	100	88	.16	.43	.....	T.	.73	.63	.07	.....	.55	.....	.....	.....
27.....	0	0	49	100	64	86	93	97	6	42	0	51	.08	.....	.35	.....	.....	.....	.....	.....	.....	.....	.....	.....
28.....	0	0	0	100	75	99	93	59	84	3	0	42	.21	.....	.07	.....	.....	.....	.....	.....	.....	.....	.....	.....
29.....	66	.....	98	.....	100	.....	93	.....	.....	53	.....	26	.14	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
30.....	48	.....	.....	.....	89	.....	92	93	.....	72	.....	59	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
31.....	.....	.....	.....	.....	81	.....	71	.....	54	72	.....	.....	3.40	2.88	3.24	5.16	4.48	5.53	4.80	2.38	0.85	3.80	1.14	0.61
Mean	47	48	69	53	81	71	71	72	54	72	55	59	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

NOTE: Hail at Peoria, 1905 to 1939

Hail has been noted or reported in Peoria or vicinity 77 times in 35 years. Most occurrences covered only a small area, with slight or no damage. Three or four storms caused losses of \$1,000 or more. One is reported at \$10,000 damage in the county. Another destroyed \$8,000 in crops and property, nearly all of it in the greenhouse district within an area less than one-fourth of a township. Old settlers stated this to be the worst hail-storm in their section in 50 years.

Four years had no hail: none occurred in any December or January. February and November report two occurrences each. May with 21, April 16, and March 14 instances show the greatest numbers. The two most damaging occurred in May and June.

MAXIMUM AND MINIMUM TEMPERATURES, 1939

Daily Maximum

Daily Minimum

Day	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct.	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct.	Nov	Dec
1.....	49	42	33	50	67	80	84	92	90	69	46	47	24	31	16	35	40	66	59	64	63	33	32	41
2.....	50	37	42	58	64	88	85	86	93	74	44	45	31	23	21	33	33	68	62	69	69	39	28	28
3.....	51	23	51	56	67	76	86	89	80	80	45	31	34	9	32	30	37	59	67	64	76	40	27	24
4.....	57	32	54	61	66	82	90	86	87	85	47	43	33	7	38	36	49	51	71	57	60	55	25	26
5.....	54	42	42	49	84	86	93	87	83	83	49	53	29	22	33	35	55	59	70	59	51	54	28	29
6.....	48	43	35	37	83	90	91	84	95	89	54	54	29	29	24	25	57	69	71	62	65	52	27	27
7.....	50	40	37	50	81	93	93	87	101	83	58	56	31	22	19	24	64	69	75	65	73	42	33	33
8.....	56	40	60	47	71	85	92	81	86	87	51	51	28	19	33	29	58	66	74	62	65	66	30	24
9.....	60	48	46	46	75	77	89	80	84	84	65	59	46	20	30	34	52	62	65	56	62	65	36	34
10.....	49	40	46	44	73	71	83	83	77	69	62	56	35	4	34	36	52	59	67	57	52	42	32	31
11.....	36	22	48	45	65	68	86	87	79	69	53	46	26	4	35	25	46	55	61	66	49	40	27	28
12.....	41	46	46	41	67	69	94	85	97	59	51	47	26	21	31	22	44	54	70	68	66	39	30	36
13.....	35	54	57	50	70	74	97	87	99	56	55	36	32	35	28	24	46	52	70	66	72	35	25	22
14.....	34	35	66	59	75	64	89	88	102	52	64	43	30	26	40	40	50	63	63	63	73	29	35	18
15.....	33	27	40	52	64	89	72	92	100	62	67	53	28	13	20	41	49	64	65	61	70	33	35	37
16.....	30	35	33	58	75	93	75	91	94	68	66	60	23	13	17	43	46	69	61	71	72	41	38	32
17.....	33	35	29	62	82	92	88	82	81	58	62	58	25	11	13	41	53	72	64	68	62	35	41	35
18.....	31	53	30	45	82	92	74	75	79	76	55	62	18	29	15	35	49	67	65	67	57	40	50	40
19.....	24	56	67	44	80	81	76	84	81	73	51	51	16	17	25	36	59	67	67	63	48	45	39	30
20.....	43	29	52	52	78	81	84	86	84	80	41	32	20	29	32	34	64	65	65	58	52	40	32	24
21.....	50	18	69	53	84	88	87	74	77	76	40	32	28	11	30	39	63	70	64	56	44	46	29	19
22.....	28	18	68	66	86	88	89	83	84	69	44	38	11	8	41	34	64	63	67	54	45	47	28	14
23.....	25	38	82	77	89	84	90	81	91	70	42	35	12	8	44	52	57	59	63	56	55	44	24	31
24.....	33	29	80	84	93	87	89	84	88	68	41	37	20	13	52	56	70	61	63	56	53	44	38	22
25.....	27	29	79	82	89	86	86	84	78	81	44	44	11	20	57	58	68	64	69	65	47	62	38	20
26.....	31	32	62	73	87	83	90	84	59	84	38	33	21	24	47	57	66	68	71	62	47	37	25	25
27.....	35	43	47	70	83	88	94	83	74	70	44	29	14	24	30	45	60	70	65	58	54	33	20	8
28.....	35	40	42	59	76	86	81	87	92	43	48	30	32	23	30	45	66	69	75	58	54	33	20	8
29.....	37	..	35	68	77	85	81	84	72	58	45	29	..	..	33	39	57	66	61	58	46	36	31	13
30.....	32	..	37	77	88	80	85	86	59	43	47	22	16	..	31	41	58	63	58	60	38	33	40	6
31.....	31	..	62	..	88	..	89	86	..	50	..	12	5	..	34	..	68	..	61	..	..	30	..	1
Mean	39.6	36.6	50.9	57.8	77.7	82.7	86.5	84.8	85.3	70.1	50.6	42.7	24.8	18.4	31.1	37.6	54.6	63.3	65.9	61.7	58.1	44.1	31.7	25.1

SOIL TEMPERATURES IN ILL.
(Recorded by College of Agr., Ill. Univ.,
Urbana, Ill. in 1939)

AVERAGE DAILY MAXIMUM					
Depth inches	June	July	Aug.	Sept.	Oct.
2.....	80.7	85.2	81.9	80.3	61.8
4.....	79.0	84.3	80.3	76.1	61.0
8.....	75.7	80.1	77.6	74.9	60.9
12.....	69.3	73.5	71.4	70.2	59.3

AVERAGE DAILY MINIMUM					
2.....	68.8	72.8	71.4	69.7	53.3
4.....	70.7	74.6	71.3	67.7	53.9
8.....	71.9	76.3	73.9	71.6	58.0
12.....	68.0	72.2	70.0	69.0	58.0

AVGE. DAILY CHANGE					
2.....	11.9	12.4	10.5	10.6	8.5
4.....	8.3	9.7	9.0	8.4	7.1
8.....	3.8	3.8	3.7	3.3	2.9
12.....	1.3	1.3	1.4	1.2	1.3

AVERAGE DAILY MEAN					
2.....	74.8	79.0	76.6	75.0	57.6
4.....	74.8	80.0	75.8	71.9	57.4
8.....	73.8	78.2	75.8	73.2	59.4
12.....	68.6	72.8	70.7	69.6	58.6

Average Air Temperatures at Urbana Ill.
(For comparisons)
Temp. 73.0 75.4 72.6 71.6 56 8

SNOWFALL: MONTHLY, SEASONAL, YEARLY

Winter	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Season	Year	Total
1884-85....	0	.5	5.7	18.0	10.0	.2	.1	0	34.5	1885	36.3
1885-86....	0	0	8.0	17.0	1.0	5.0	.4	0	31.4	1886	22.6
1886-87....	0	1.5	7.7	4.2	1.7	7.0	.5	0	22.6	1887	22.0
1887-88....	T.	.4	8.2	6.6	1.3	.5	0	0	17.0	1888	9.0
1888-89....	0	.3	.3	3.6	8.0	1.2	0	0	13.4	1889	15.8
1889-90....	0	3.0	0	1.0	6.0	3.0	0	0	13.0	1890	10.0
1890-91....	0	0	0	4.8	1.0	7.0	.6	0	13.4	1891	16.5
1891-92....	0	.6	2.5	8.5	1.7	1.3	0	0	14.6	1892	16.4
1892-93....	0	4.6	.3	8.9	16.5	.4	0	0	30.7	1893	39.8
1893-94....	0	4.0	10.0	5.0	8.0	.3	0	0	27.3	1894	14.0
1894-95....	0	.7	T.	7.0	2.5	4.0	2.0	0	16.2	1895	21.4
1895-96....	0	5.0	.9	1.3	12.0	1.5	3.0	0	23.7	1896	20.8
1896-97....	0	3.0	T.	9.0	5.2	4.7	.5	0	22.4	1897	25.4
1897-98....	0	.5	5.5	9.5	5.0	2.0	T.	0	22.5	1898	19.5
1898-99....	0	2.0	1.0	2.0	1.7	8.5	0	0	15.2	1899	17.2
1899-00....	0	T.	5.0	T.	26.5	1.4	.8	0	33.7	1900	29.8
1900-01....	0	.5	.6	1.0	10.8	.5	0	0	13.4	1901	16.0
1901-02....	0	0	3.7	6.3	2.1	.2	0	0	12.3	1902	9.2
1902-03....	0	T.	.6	7.0	4.5	0	0	0	12.1	1903	15.5
1903-04....	0	0	4.0	9.9	10.0	5.3	0	0	29.2	1904	28.4
1904-05....	0	0	3.2	10.5	12.8	.3	.5	0	27.3	1905	25.6
1905-06....	T.	T.	1.5	3.1	.1	13.2	0	0	17.9	1906	17.3
1906-07....	T.	.3	.6	8.5	1.4	7.9	.7	0	19.4	1907	21.0
1907-08....	0	T.	2.5	3.4	12.3	T.	T.	0	18.2	1908	19.7
1908-09....	0	.2	3.8	2.7	5.0	1.4	T.	0	13.1	1909	27.1
1909-10....	T.	T.	18.0	2.3	2.1	0	1.7	0	24.1	1910	7.7
1910-11....	T.	T.	1.6	11.3	7.2	.1	4.0	0	24.2	1911	31.6
1911-12....	T.	2.7	6.3	2.1	8.5	10.5	4.5	0	34.6	1912	25.6
1912-13....	0	T.	T.	7.3	9.5	5.3	T.	0	22.1	1913	25.2
1913-14....	.1	T.	3.0	8.6	12.2	1.1	T.	0	25.0	1914	36.3
1914-15....	0	T.	14.4	8.4	.1	4.1	0	0	27.0	1915	19.8
1915-16....	0	T.	7.2	3.9	3.1	4.0	0	0	18.2	1916	15.2
1916-17....	.3	T.	3.9	4.1	1.2	T.	T.	0	9.5	1917	13.3
1917-18....	.6	T.	7.4	16.9	.4	.2	T.	0	25.5	1918	24.5
1918-19....	0	T.	7.0	.3	9.8	4.4	0	0	21.5	1919	16.6
1919-20....	0	.9	1.2	8.5	.2	.3	8.2	0	19.3	1920	22.3
1920-21....	T.	.5	4.6	3.2	.2	T.	.1	0	8.6	1921	8.9
1921-22....	0	4.2	1.2	2.8	.6	1.3	0	0	10.1	1922	9.1
1922-23....	0	2.5	1.9	5.4	1.5	3.7	1.6	.1	16.7	1923	12.9
1923-24....	T.	T.	.6	5.0	5.9	7.9	.4	0	19.8	1924	26.0
1924-25....	0	.2	6.6	5.1	1.1	7.3	0	0	20.3	1925	24.1
1925-26....	2.8	4.8	3.0	4.8	3.0	18.2	7.4	0	44.0	1926	45.7
1926-27....	0	10.7	1.6	15.5	1.3	.3	.1	0	29.5	1927	23.7
1927-28....	0	T.	6.5	1.0	1.1	2.5	.1	0	11.2	1928	6.0
1928-29....	0	T.	1.3	10.1	4.1	T.	T.	0	15.5	1929	27.8
1929-30....	3.3	.8	9.5	14.1	6	5.6	0	0	33.9	1930	25.3
1930-31....	T.	3.8	1.2	1.2	T.	10.3	T.	0	16.5	1931	17.1
1931-32....	0	7	4.9	1.6	3.4	5.9	T.	0	16.5	1932	22.4
1932-33....	T.	5.6	5.9	6	10.9	4.1	T.	0	27.1	1933	17.1
1933-34....	0	T.	1.5	.8	10.8	14.7	T.	0	27.8	1934	34.5
1934-35....	0	0	8.2	.1	1.2	.1	3.0	0	12.6	1935	15.4
1935-36....	0	.1	10.9	15.4	7.3	.9	3.0	0	37.6	1936	27.3
1936-37....	T.	.1	.6	4.7	2.0	1.2	T.	0	8.6	1937	12.8
1937-38....	T.	4.1	.8	6.3	7.0	T.	6.2	0	24.4	1938	21.0
1938-39....	T.	.6	.9	13.6	3.3	T.	T.	0	18.4	1939	26.7
1939-40....	0	T.	8.0	4.3	8.2	....	....	....	....	....	....
Mean	0.1	1.2	4.0	6.2	5.3	3.5	0.9	T.	21.2		21.2
Heaviest single storms	3.3 1929	9.7 1926	9.4 1909	14.4 1927	18.0 1900	9.6 1926	7.5 1920	0.1 1923	....	....	....

Amounts for 1884 and 1885 are estimated from precipitation records of river observer. Record 1886 to 1905 by Dr. Brendel, co-operative observer.

The totals for both the winters and the years average practically alike, and range from 6 or 8 inches to about 45 inches. Six years and eight winters had more than 30 inches; and six years and three winters had less than 10 inches.

The earliest trace of snow was on October 5th, and the latest on May 9th; while measureable snow fell once on October 20th and on May 8th.

Some single storms in earlier years may have been heavier than those at foot of the above 55-year table. An unverified report mentions a "foot" of snowfall April 6, 1874.

The storm of February 27-28, 1900, giving 18 to 20 inches in this section, is thought to be the heaviest in a century at Peoria.

In the winter of 1830-31 two storms, on December 29-30 and January 5th, are said by Drown's Record and Historical Review (pub. 1849) to have given 4 feet of snow, and blockaded all roads for 2 or 3 weeks. That does not seem impossible, for recent decades have had single falls of around 2 feet of snow in central Illinois.

UNIVERSITY OF ILLINOIS, Urbana, Ill.

WEATHER BUREAU

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U. S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ANNUAL METEOROLOGICAL SUMMARY

WITH COMPARATIVE DATA

1941

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UNIVERSITY OF ILLINOIS

PEORIA, ILLINOIS

Compiled by
M.L. Fuller

Printed at
U.S. WEATHER BUREAU OFFICE
Peoria, Ill. Mar., 1942

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Peoria's record of temperature and rainfall was kept by Dr. Frederick Brendel from Dec. 1855 to Jan. 1905, when the present station began. The staff of such "cooperating" observers has grown from a few hundred or less in the 1850s to more than 4,000, - or one in every county of the U.S. now. Their work was supervised, examined, corrected by the Smithsonian Institution, U.S. Signal Service, or U.S. Weather Bureau in succession.

Along with these rain-and-temperature records, the fully equipped stations have grown from 100 or so in 1871 to more than 300 now. These have instruments that make continuous automatic records of part or all the following items:- Temperature, pressure of the air, direction and force of the wind, duration of sunshine in minutes, time and rate of rainfall, etc. Many of these records and a large share of the cooperatives, cover 70 or more years, and some more than 100; and are long enough to show a dependable average, and most of the possible variations, of the weather for practically every county in the country. This system of carefully checked weather records for the whole country is widely useful in many ways, including the planning of operations or investments in farming, industry or merchandizing, in unfamiliar sections; and by civil engineers in the planning and construction of dams, drainage systems, water power projects, flood control, water supply works, heating plants, air conditioning, etc. These published records are kept up to date, and are available in every Weather Bureau Office and many city libraries, for the use of anyone desiring the information.

This pamphlet summarizes part of the material prepared at this station in recent years. The pages are arranged to permit binding for file, or our furnishing of separates for specific inquiries.

ANNUAL METEOROLOGICAL SUMMARY

PEORIA, ILL. City Office

YEAR 1941

[Lat. 40° 43' N.: Long. 89° 36' W.

Elevations: Station 602. barometer 609 ft., above sea-level,

Thermometers 11, rain gage 4, anemometer 45 ft. above ground]

MONTH	TEMPERATURE					PRECIPITATION			Humidity + Per cent				SUNSHINE			WIND [True velocities]				NUMBER OF DAYS																			
	Mean maximum	Mean minimum	Mean 1941	Highest	Date.	Lowest	Date.	Total 1941	Greatest in 24 hours	Date.	Snowfall	12:30 a.m., C.S.T.	6:30 a.m., C.S.T.	12:30 p. m., C.S.T.	6:30 p.m., C.S.T.	Number of hours	Percent of possible	Cloudiness [scale 0 to 10]	Avg. miles per h'r.	Highest		Direction.	Date.	Clear	Partly Cloudy	Cloudy	Precip. .01 or more	Snow .01 or more	Thunderstorms	Light Fog	Dense Fog	Temperature				Degree-Days Heating	Degree-Days Cooling		
																				Max	Min											32 or below	90 or above	32 or below	0 or below				
January	33.9	22.8	28.4	51	12	2	19	3.56	1.16	1-2	9.1	87	90	79	86	120	42	7.0	7.1	w.	22	w.	3	7	5	19	13	5	0	3	0	0	13	0	28	0	1136	0	
February	33.5	17.9	25.7	57	12	-2	19	1.01	.68	12-13	3.3	85	86	68	74	191	64	4.8	7.4	nw.	25	w.	17	12	6	10	6	15	0	0	0	14	0	27	0	1105	0		
March	44.2	26.6	35.4	61	20	7	18	1.86	1.04	10-11	5.1	81	86	62	71	228	62	4.9	7.2	n.	23	w.	16	14	6	11	6	8	0	3	0	0	2	0	23	0	919	0	
April	66.0	46.1	56.0	87	13	35	2	4.40	1.28	19	0	80	84	60	65	234	59	5.4	6.8	e.	25	sw.	20	11	4	13	3	10	0	4	0	0	0	0	0	298	0		
May	78.1	55.6	65.8	92	28	37	10	5.64	1.05	14	0	78	78	51	60	350	78	3.8	5.4	s.	20	w.	7	14	14	9	3	0	0	7	0	0	0	0	0	89	0		
June	84.1	62.8	73.4	98	30	52	17	3.16	1.63	9	0	83	85	58	67	304	67	4.6	4.7	s.	24	nw.	30	10	11	11	3	0	0	2	0	0	0	0	0	20	0		
July	88.6	65.4	77.0	102	29	53	4	1.89	1.58	13	0	79	83	52	54	360	79	3.5	4.8	ne.	23	nw.	10	16	12	12	4	0	0	3	0	0	0	0	0	0	65	93	
August	87.2	65.1	76.2	101	11	54	19	2.07	.91	17-18	0	81	83	52	60	320	75	4.0	4.5	e.	13	sw.	30	16	11	8	3	0	0	0	0	0	0	0	0	0	0	97	21
September	81.1	58.3	69.7	93	4	38	26	4.87	2.30	24-25	0	82	87	56	67	236	63	4.5	5.1	s.	17	w.	8	12	10	11	3	0	0	0	0	0	0	0	0	0	61	0	
October	67.3	48.8	58.0	83	5	27	28	10.53	2.58	2-3	0	87	91	70	78	148	43	5.6	4.7	s.	19	sw.	31	9	8	14	18	0	0	1	0	0	0	0	0	243	0		
November	51.6	35.0	43.3	75	17	15	24	2.02	.81	19	3.5	87	90	69	79	168	56	4.9	6.7	s.	19	w.	1	15	3	8	7	0	0	4	0	0	0	0	0	660	0		
December	42.8	30.1	36.4	60	21	12	29	1.38	.46	22-23	3.6	87	88	72	81	114	40	6.6	6.4	s.	24	sw.	5	8	6	17	10	4	0	6	0	0	0	0	0	886	0		
Year	63.2	44.5	53.9	102	Jul. 29	-2	Feb 19	42.39	2.58	Oct 2-3	24.6	83	86	62	70	2773	62	5.0	5.9	s.	25	sw.	Apr. 20	144	98	123	120	32	37	33	1	38	48	112	1	5337	296		

+Humidity observations at airport 4 miles southwest of City Office.

* Degree-days: heating below 65°, cooling above 76°.

COMPARATIVE DATA AND EXTREMES

Month	Temperature						Precipitation						Relative humidity, per cent			Sunshine		Wind (True velocities)				Average number of days												
	Average daily maximum	Average daily minimum	Normal	Absolute highest	Year	Absolute lowest	Year	Normal	Greatest in 24 hours	Year	Averages snowfall	Greatest snowfall in 24 hours	Year	a. m.	Noon—local time	p. m.	Total hours	Per cent	Average hourly velocity	Prevailing direction	Highest velocity	Direction highest velocity	Year	Clear	Partly cloudy	Cloudy	Rain, .01 or more	Snow (trace or more)	Thunderstorms	Dense fog	Max. temp. 90° or above	Minimum temp. 32° or below	Minimum temp. 0° or below	
No. Years	56	56	50	86	86	86	86	50	57	57	57	57	57	37	24	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
January	33.1	17.8	23.1	71	1909	-27	1834	1.78	2.90	1897	6.3	13.6	1927	88	73	80	146	49	8.7	S	42	S	1906	11	7	13	9	10	5	2	0	28	4	
February	39.4	19.8	25.9	74	1932	-26	1905	2.01	3.16	1942	5.2	18.0	1900	87	69	76	165	55	9.0	sw	37	sw	1918	10	7	11	8	9	1	2	0	24	2	
March	47.9	30.4	37.0	87	1907	-6	1913	2.73	3.29	1859	3.5	9.0	1926	84	62	68	213	57	9.4	S	41	sw	1918	12	8	11	10	7	3	1	0	19	5	
April	61.8	41.5	50.9	92	1899	14	1920	3.38	2.69	1905	0.8	7.0	1920	79	57	61	239	60	9.2	S	39	w	1909	11	9	10	12	2	5	5	5	6	0	
May	73.5	51.9	61.7	104	1934	28	1906	4.06	5.52	1927	T	0.1	1923	77	59	60	295	65	7.7	S	37	w	1905	12	11	8	12	5	7	5	5	5	0	
June	83.2	61.4	70.9	105	1936	35	1859	3.77	4.74	1911	0	0	.....	79	55	60	329	73	6.7	S	38	nw	1924	14	11	5	10	0	10	8	5	5	0	
July	88.2	65.4	75.4	113	1936	46	1911	3.58	4.09	1895	0	0	.....	80	52	58	356	78	5.9	S	40	w	1906	17	11	3	9	0	8	5	5	5	0	
August	85.5	63.2	72.5	106	1936	41	1915	3.12	4.49	1926	0	0	.....	84	55	65	308	72	6.2	S	46	n	1907	15	8	7	5	0	6	5	5	5	0	
Sept.	78.2	55.9	64.3	104	1899	26	1899	4.03	3.63	1888	0.1	0	.....	87	56	69	249	67	6.9	S	29	n	1907	15	8	7	10	9	2	5	5	5	0	
October	65.2	43.8	52.0	92	1922	7	1925	2.29	3.09	1899	1.3	3.3	1929	86	66	70	211	61	8.3	S	38	w	1905	15	6	10	8	1	1	1	5	5	0	
November	49.1	32.3	37.5	81	1937	-1	1857	2.37	3.00	1858	4.1	9.1	1926	86	66	72	156	53	8.3	S	40	w	1905	11	8	11	8	4	1	1	0	16	5	
December	36.7	22.5	28.1	71	1875	-21	1924	1.77	2.60	1895	.....	9.2	1909	88	73	81	131	45	8.2	S	32	w	1927	9	8	14	9	8	0	2	0	26	2	
Year	61.8	42.2	49.9	113	July 1936	-27	Jan. 1884	34.89	5.52	May 1927	21.3	18.0	Feb 1900	84	61	68	2798	61	7.7	S	46	N	Aug. 1907	152	105	108	114	41	51	9	31	124	8	

Observations made at 7:00 a.m. and p.m. 1905-36, 6:30 a.m. and p.m. beginning 1937.

† Also other dates.

§ Less than one half.

Peoria Illinois 1941

Monthly and Annual Average Temperatures 86 Years

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept.	Oct	Nov	Dec	An'l
.....													
1855..												29.0	
1856..	15.4	22.0	33.4	55.1	59.4	73.4	75.1	68.2	62.5	55.2	36.5	22.2	48.2
1857..	12.2	34.9	31.2	38.5	56.3	67.5	74.4	71.2	66.4	50.4	34.2	34.1	47.5
1858..	34.4	20.4	40.5	49.4	56.5	72.3	74.5	72.8	64.5	51.1	35.1	31.3	50.2
1859..	27.2	32.1	43.8	46.4	64.5	68.3	75.2	71.5	62.9	49.3	42.4	19.4	50.2
1860..	25.2	31.6	43.6	52.3	66.4	72.4	74.1	72.5	63.7	53.3	36.4	23.6	51.3
1861..	23.2	33.7	38.6	51.7	57.4	72.3	72.2	74.1	63.5	53.4	39.2	33.4	51.1
1862..	21.1	23.2	36.2	47.2	62.6	68.7	75.4	74.6	67.3	53.2	36.0	34.3	50.0
1863..	32.5	31.2	36.4	51.2	62.8	66.6	72.1	72.4	62.3	45.1	40.2	31.1	50.2
1864..	23.2	33.4	37.3	46.5	63.3	71.1	71.4	72.3	64.4	48.0	39.2	25.4	49.1
1865..	23.4	35.2	39.1	48.6	61.1	72.0	68.2	70.4	70.2	53.4	41.0	25.0	50.5
1866..	24.2	25.3	33.2	53.7	58.0	67.6	75.1	67.4	57.9	52.6	41.1	27.0	48.9
1867..	19.0	31.9	28.5	48.9	53.0	72.1	73.4	73.1	66.8	53.6	43.0	28.1	49.3
1868..	18.0	26.9	44.3	45.0	59.6	69.2	80.0	68.0	59.0	50.2	40.0	24.4	48.9
1869..	33.1	31.4	31.4	46.8	59.0	66.0	70.0	74.0	64.0	44.0	34.6	29.4	48.6
1870..	27.2	30.3	34.4	53.0	65.6	72.1	78.0	71.5	68.0	54.0	42.1	26.2	51.8
1871..	28.5	32.0	44.6	54.8	64.6	72.0	73.5	73.0	63.3	56.0	35.1	23.2	51.7
1872..	25.3	28.2	33.4	52.0	62.4	73.2	76.3	76.0	61.3	51.1	22.0	19.4	49.6
1873..	17.9	24.8	37.4	47.6	61.2	77.0	75.1	76.5	62.6	48.0	34.6	31.0	49.6
1874..	27.2	30.0	37.6	42.7	65.0	75.2	78.3	76.0	67.4	53.8	37.6	29.6	51.5
1875..	13.2	14.0	31.6	46.5	61.0	70.1	74.0	72.2	63.0	48.4	35.0	37.1	46.9
1876..	32.5	33.2	34.2	52.6	64.8	69.0	76.6	74.0	63.6	49.8	37.2	17.8	50.3
1877..	20.0	37.3	32.3	52.0	62.8	69.7	76.6	74.0	68.4	56.0	38.6	44.3	52.6
1878..	31.5	37.3	49.8	56.0	60.0	69.4	80.0	76.6	67.2	51.8	41.8	21.4	53.4
1879..	19.6	22.8	41.5	52.1	65.2	71.0	79.0	76.0	62.4	61.1	42.0	29.0	51.4
1880..	40.2	35.0	39.1	53.0	68.3	74.3	76.6	76.7	63.4	49.8	30.2	22.4	52.5
1881..	17.1	23.7	32.2	45.8	69.6	71.0	78.1	78.4	71.2	56.6	39.9	37.3	52.0
1882..	28.4	40.3	42.0	52.5	57.2	71.0	72.0	73.6	64.2	57.0	42.3	27.1	52.4
1883..	15.0	23.7	35.1	53.1	58.3	70.3	75.1	71.0	62.3	51.0	42.5	31.4	49.1
1884..	17.7	29.2	37.6	51.2	62.4	72.0	74.2	73.0	71.4	57.5	41.8	26.8	51.2
1885..	16.8	15.9	24.2	51.2	62.0	71.0	79.2	72.1	65.4	50.6	42.0	30.8	48.8
1886..	16.9	26.4	37.2	54.7	64.7	71.1	77.1	75.7	66.8	55.4	36.6	21.0	50.3
1887..	17.9	29.7	35.9	54.4	68.1	74.7	80.1	73.6	65.6	47.9	38.1	26.9	51.1
1888..	15.5	25.4	34.1	52.4	58.5	71.4	76.6	69.8	58.9	48.8	38.9	31.3	48.4
1889..	27.5	22.6	40.1	51.9	59.6	70.3	73.5	70.3	61.9	47.0	36.3	40.5	50.1
1890..	29.8	32.7	32.0	52.8	58.4	75.9	76.1	70.2	61.1	51.7	41.1	30.8	51.0
1891..	29.2	28.7	31.3	53.1	58.9	70.6	69.6	69.1	67.5	51.4	34.7	35.5	50.0
1892..	18.4	32.0	34.4	48.0	57.4	71.2	73.8	72.8	62.9	55.5	34.5	25.5	48.9
1893..	13.3	23.0	36.4	48.8	58.2	72.7	77.9	71.0	66.0	53.0	36.2	27.4	48.7
1894..	27.5	24.2	44.0	56.4	60.9	74.2	75.4	72.0	65.0	52.3	34.7	31.5	51.5
1895..	17.8	17.2	35.8	52.9	63.4	71.5	72.7	73.2	67.1	45.1	37.0	30.3	48.9
1896..	28.1	27.4	34.8	58.1	68.5	70.9	74.5	72.8	60.7	49.0	38.0	33.8	51.4
1897..	22.2	29.3	37.0	49.2	58.9	70.9	76.1	69.4	69.0	57.9	38.6	24.5	50.2
1898..	28.5	29.1	41.0	49.1	60.5	73.3	76.0	72.6	68.0	50.2	36.2	25.2	50.8
1899..	24.4	18.1	31.1	53.0	63.3	72.7	74.1	74.9	62.6	57.2	44.7	26.8	50.2
1900..	28.6	21.7	31.7	51.8	63.6	70.7	74.7	78.1	66.2	59.4	38.2	29.3	51.2
1901..	26.8	20.8	36.0	49.9	61.1	74.1	81.1	73.7	64.6	54.3	36.8	24.6	50.3
1902..	26.1	21.1	41.4	50.0	66.6	67.8	74.4	70.3	61.5	55.1	47.6	27.4	50.8
1903..	26.1	26.7	44.1	50.0	65.2	67.1	75.9	71.4	64.5	52.7	35.9	21.2	50.1
1904..	18.2	20.0	36.4	45.4	62.9	70.4	72.9	69.1	65.4	51.8	41.3	28.0	48.5
1905..	18.8	15.2	43.9	50.5	61.6	71.2	72.0	74.4	67.6	52.3	40.0	29.6	50.0
1906..	30.2	27.0	29.3	54.2	63.0	69.3	72.6	75.4	69.7	52.8	39.5	30.6	51.1
1907..	28.0	28.3	45.6	43.4	55.1	66.9	74.2	71.9	64.4	51.4	38.3	32.8	50.0
1908..	26.8	27.0	42.3	51.0	62.0	69.4	74.2	72.6	69.0	51.1	41.8	29.4	51.6
1909..	26.3	31.8	36.8	48.4	59.2	71.2	71.4	77.0	64.0	49.8	48.0	19.2	50.3
1910..	24.3	23.8	49.8	52.0	56.4	69.8	75.4	72.2	65.4	56.6	35.2	25.4	50.5
1911..	27.4	32.2	40.2	48.4	68.2	75.5	75.0	72.0	67.8	51.4	33.3	33.0	52.0
1912..	11.0	20.8	28.4	51.5	61.2	68.4	74.8	72.4	67.0	54.8	41.8	32.7	49.0
1913..	27.8	24.4	35.4	51.7	62.4	73.2	78.5	77.8	66.8	52.0	47.2	35.7	52.7
1914..	32.2	19.3	36.8	51.2	65.0	74.2	78.8	75.4	66.2	57.2	43.4	20.8	51.7
1915..	21.0	35.4	34.1	58.8	58.6	67.8	71.9	67.2	67.8	55.6	43.8	27.8	50.8
1916..	27.2	24.4	37.4	49.8	61.4	65.8	81.0	76.0	63.6	54.2	42.4	25.2	50.7
1917..	24.4	20.8	40.0	47.4	55.6	67.7	75.0	70.8	63.7	44.2	41.8	19.8	47.6
1918..	10.4	27.9	45.6	45.8	66.4	71.4	72.8	77.5	58.2	56.2	41.9	36.6	50.9
1919..	29.2	30.8	40.8	51.3	58.2	74.8	78.4	71.9	68.2	55.8	37.9	20.6	51.5
1920..	18.6	27.6	41.5	44.2	60.8	72.0	73.6	72.2	68.5	60.2	38.6	30.8	50.7
1921..	32.2	34.4	47.3	54.3	65.1	76.8	79.8	73.8	70.0	55.6	39.9	32.2	55.1
1922..	23.8	29.9	41.2	52.5	65.6	73.2	74.7	74.5	69.6	58.0	43.2	28.8	52.9
1923..	31.8	23.2	34.2	49.4	61.0	73.0	77.6	73.4	65.4	50.4	42.2	38.0	51.6
1924..	19.0	28.0	34.8	53.5	55.5	69.2	71.0	72.7	60.4	59.2	41.2	21.8	48.9
1925..	23.5	33.1	41.1	57.8	57.8	73.4	74.9	73.9	71.6	43.4	37.7	24.8	51.1
1926..	26.9	33.4	32.0	44.0	64.0	67.2	75.8	74.4	65.6	52.5	36.2	26.8	49.9
1927..	23.4	36.1	43.2	50.8	60.0	67.2	73.7	68.5	70.0	58.0	43.3	25.9	51.7
1928..	26.5	32.3	40.4	47.6	63.3	66.0	75.6	74.8	61.2	57.0	41.7	32.0	51.5
1929..	17.8	21.2	45.4	53.6	59.4	68.6	75.3	71.6	65.2	53.0	35.8	28.2	49.6
1930..	17.0	38.4	33.8	55.0	63.3	71.6	78.2	76.1	69.8	53.0	42.4	29.8	52.8
1931..	32.6	36.7	36.7	52.6	58.2	75.7	79.2	74.0	73.0	59.2	50.2	38.6	55.6
1932..	33.2	36.8	36.8	51.4	63.7	73.4	76.7	71.2	64.8	52.8	36.0	27.8	51.9
1933..	37.6	26.8	39.4	50.9	62.8	78.9	78.5	73.0	72.6	51.8	39.6	32.6	53.7
1934..	31.7	23.8	34.1	51.6	65.7	79.2	81.0	74.4	63.8	57.4	46.0	26.0	53.1
1935..	26.2	31.4	44.3	48.4	58.8	67.4	79.2	74.8	65.8	54.4	38.6	23.2	50.8
1936..	17.2	14.8	41.9	48.2	67.0	72.0	84.3	80.3	70.5	54.2	37.8	33.8	51.8
1937..	23.8	27.8	36.2	49.7	63.2	70.8	75.8	78.3	65.8	52.2	36.7	26.8	50.6
1938..	26.2	36.2	47.4	53.3	62.2	69.9	76.5	77.2	68.1	60.3	43.0	30.0	54.2
1939..	32.2	27.5	41.0	47.7	66.2	73.0	76.2	73.2	71.7	57.1	41.2	33.9	53.4
1940..	13.3	29.4	35.9	49.8	58.9	73.4	77.4	74.8	66.6	59.0	38.2	34.0	50.9
1941..	28.4	25.7	35.4	56.0	66.8	73.4	77.0	76.2	69.7	58.0	43.3	36.4	53.9
Mean	24.3	27.7	37.8	50.7	61.8	71.3	75.6	73.3	65.6	53.2	39.4	28.6	51.2

Sept. and Nov. were warmest of record in 1931.

Lowest Minimum Temperature of Record
Lowest Temperatures for each day of the Year and Date of Its Occurrence 58 Years of Record 1884 to 1941 Inclusive

Date	January		February		March		April		May		June		July		August		September		October		November		December		Date
	Min.	Year	Min.	Year	Min.	Year	Min.	Year	Min.	Year	Min.	Year	Min.	Year	Min.	Year	Min.	Year	Min.	Year	Min.	Year	Min.	Year	
1.....	-12	1887	-13	1905	3	1913	17	1899	29	1907	43	1910	49	1924	52	1925	45	1915	32	1920	22	1911	-4	1893	1
2.....	-20	1887	-20	1905	-6	1913	16	1899	30	1911	44	1929	48	1904	51	1920	48	1909	32	1886	17	1911	-6	1886	2
3.....	-14	1919	-13	1886	10	1916	18	1936	30	1911	42	1929	49	1917	48	1912	45	1908	30	1888	18	1910	-4	1929	3
4.....	-12	1919	-15	1918	8	1893	20	1887	30	1907	41	1929	50	1924	44	1912	44	1928	27	1935	19	1901	-	1893	4
5.....	-27	1884	-14	1936	5	1917	14	1920	33	1917	45	1894	52	1924	52	1912	46	1935	31	1901	18	1908	5	1928	5
6.....	-13	1912	-9	1907	3	1932	24	1898	33	1890	45	1907	52	1915	52	1910	44	1918	25	1935	19	1927	3	1936	6
7.....	-21	1887	-17	1905	0	1899	24	1939	28	1906	42	1910	52	1906	53	1903	46	1932	28	1935	22	1925	0	1909	7
8.....	-6	1912	-22	1933	3	1932	22	1914	32	1923	40	1913	49	1908	52	1921	47	1932	29	1917	12	1925	-3	1917	8
9.....	-13	1886	-22	1899	4	1934	23	1938	33	1906	40	1913	51	1918	47	1922	45	1924	26	1915	21	1935	-6	1917	9
10.....	-15	1886	-12	1899	-1	1934	21	1909	35	1923	44	1928	54	1895	54	1910	41	1910	27	1925	17	1913	-8	1817	10
11.....	-19	1918	-11	1936	7	1934	25	1939	32	1907	45	1913	50	1898	53	1930	35	1917	23	1906	16	1926	-11	1917	11
12.....	-21	1918	-16	1905	6	1906	22	1939	35	1928	44	1903	52	1918	51	1931	41	1917	26	1917	12	1911	-7	1932	12
13.....	-17	1916	-26	1905	7	1926	24	1939	34	1912	46	1913	52	1918	50	1931	37	1932	21	1917	8	1940	-2	1903	13
14.....	-12	1927	-15	1905	7	1891	22	1907	34	1920	49	1933	50	1926	51	1924	37	1923	22	1909	8	1940	-6	1901	14
15.....	-20	1927	-15	1905	12	1906	23	1928	35	1920	43	1917	47	1930	49	1929	37	1916	23	1937	10	1940	-10	1917	15
16.....	-11	1912	-2	1904	4	1900	27	1904	34	1921	40	1917	51	1930	52	1929	35	1916	31	1905	11	1933	-13	1932	16
17.....	-16	1930	-13	1903	5	1906	24	1907	37	1935	49	1914	49	1911	52	1924	36	1937	29	1919	12	1891	-5	1914	17
18.....	-19	1930	-14	1936	2	1923	29	1926	36	1916	48	1920	53	1924	54	1908	34	1916	29	1930	12	1891	-6	1922	18
19.....	-13	1940	-7	1936	-	1923	27	1926	35	1929	49	1914	47	1909	52	1932	37	1918	28	1930	8	1914	-10	1901	19
20.....	-12	1918	-7	1929	2	1906	28	1897	39	1929	47	1914	54	1910	46	1897	33	1918	23	1930	7	1914	-9	1901	20
21.....	-13	1924	-1	1918	14	1906	29	1901	36	1929	52	1902	52	1913	46	1908	38	1901	22	1930	4	1937	-6	1916	21
22.....	-17	1930	-4	1910	7	1888	29	1936	37	1924	48	1912	52	1911	46	1923	37	1907	26	1923	6	1937	-11	1916	22
23.....	-18	1886	-9	1910	12	1940	23	1910	35	1917	48	1902	53	1927	50	1923	36	1928	26	1917	10	1898	1	1914	23
24.....	-13	1915	-5	1910	13	1940	22	1909	34	1925	48	1936	52	1909	43	1920	33	1928	27	1911	7	1893	-12	1924	24
25.....	-17	1894	-4	1934	10	1940	28	1934	30	1925	52	1916	51	1911	46	1917	29	1907	21	1887	14	1938	-12	1924	25
26.....	-11	1936	-4	1940	15	1894	29	1939	38	1901	48	1926	46	1911	41	1910	29	1928	26	1914	3	1898	-8	1935	26
27.....	-11	1936	-9	1934	20	1937	30	1932	36	1907	47	1905	51	1937	43	1910	33	1918	22	1925	1	1898	-18	1924	27
28.....	-18	1915	3	1891	12	1887	30	1928	36	1907	50	1938	55	1925	43	1915	34	1925	14	1925	-1	1930	-24	1924	28
29.....	-11	1899	8	1912	13	1887	35	1913	40	1930	45	1923	51	1928	47	1911	32	1908	13	1925	0	1929	-13	1917	29
30.....	-10	1936	-	-	16	1923	29	1908	37	1930	49	1925	50	1895	44	1915	26	1908	7	1925	-1	1929	-12	1909	30
31.....	-11	1936	-	-	12	1923	29	1908	36	1897	49	1925	53	1925	41	1915	26	1899	14	1925	1	1929	-5	1927	31

Notes

Zero Days in 58 Years:-

Jan. averaged 4 per year

Had 15 in 1918

None in 13 Januarys

Feb. averaged 3 per year

Had 15 in 1936

None in 22 Februarys

Dec. averaged 2 per year

Had 11 in 1909

None in 25 December

The year 1936 had 26 zero days.

Yrs. 1907, 1921, 1931, had none.

Avg. yearly number, 8.5

Winters of 1917-18 and 1935-36 had

30 each

Winters of 1905-06, 1931-32 had none

In 1936, the 31 days, Jan. 20 to Feb.

19, inclusive had only 5 days not

reaching zero or below.

Highest Maximum Temperature of Record
Highest Temperature for Each Day of the Year, and Date of Its Occurrence 58 Years of Record 1884 to 1941 Inclusive

Date	January		February		March		April		May		June		July		August		September		October		November		December		Date
	Max.	Year	Max.	Year	Max.	Year	Max.	Year	Max.	Year	Max.	Year	Max.	Year	Max.	Year	Max.	Year	Max.	Year	Max.	Year	Max.	Year	
1.....	56	1891	63	1911	67	1921	78	1905	89	1901	105	1934	102	1931	99	1897	101	1913	89	1937	81	1937	61	1922	1
2.....	60	1897	54	1920	70	1923	84	1940	92	1901	100	1934	100	1925	101	1888	100	1913	91	1922	78	1938	59	1932	2
3.....	59	1897	60	1931	68	1894	80	1928	92	1895	100	1934	100	1911	104	1887	99	1913	92	1922	77	1938	67	1916	3
4.....	57	1939	68	1931	70	1910	86	1929	89	1901	97	1899	106	1936	102	1930	97	1925	90	1922	75	1924	62	1916	4
5.....	60	1890	59	1938	64	1918	85	1929	88	1896	98	1911	105	1936	104	1918	104	1899	89	1922	75	1924	58	1916	5
6.....	61	1907	59	1904	66	1937	85	1929	92	1896	97	1934	106	1936	100	1918	101	1899	89	1939	77	1915	57	1892	6
7.....	65	1907	63	1925	74	1925	88	1933	92	1896	99	1933	106	1936	98	1918	101	1939	88	1939	79	1915	67	1915	7
8.....	56	1939	62	1925	66	1887	84	1931	93	1896	96	1934	105	1936	101	1913	100	1922	88	1938	78	1931	60	1918	8
9.....	60	1939	60	1938	71	1918	84	1887	94	1895	100	1911	103	1936	104	1934	100	1933	86	1938	75	1931	67	1918	9
10.....	57	1933	74	1932	74	1894	92	1930	93	1896	100	1911	106	1936	103	1887	97	1897	87	1938	71	1912	64	1889	10
11.....	62	1890	65	1932	67	1911	91	1930	90	1896	99	1933	108	1936	103	1923	98	1933	87	1928	77	1911	61	1896	11
12.....	66	1890	69	1938	73	1887	89	1930	90	1857	98	1894	107	1936	99	1918	97	1939	86	1890	75	1902	60	1896	12
13.....	60	1932	65	1938	77	1933	90	1887	90	1900	98	1894	109	1936	104	1936	97	1897	88	1899	72	1902	58	1920	13
14.....	64	1928	67	1918	70	1889	84	1936	93	1887	98	1894	110	1936	99	1936	98	1893	89	1897	73	1931	62	1891	14
15.....	58	1933	72	1921	77	1935	84	1896	93	1894	98	1894	113	1936	100	1936	95	1927	90	1897	71	1931	61	1933	15
16.....	60	1889	60	1890	72	1930	88	1896	93	1894	100	1918	104	1887	98	1913	93	1931	85	1938	76	1931	59	1889	16
17.....	67	1894	64	1890	80	1894	88	1894	92	1894	100	1887	106	1887	98	1895	95	1927	86	1892	75	1941	57	1895	17
18.....	59	1933	63	1913	79	1903	86	1896	93	1902	101	1887	101	1930	106	1936	95	1895	84	1924	72	1941	57	1923	18
19.....	57	1933	71	1930	79	1921	82	1915	92	1902	98	1887	103	1930	99	1936	93	1925	83	1924	78	1930	56	1918	19
20.....	65	1906	67	1930	79	1921	87	1936	92	1902	100	1934	102	1930	96	1916	93	1931	86	1894	71	1913	56	1894	20
21.....	61	1906	69	1930	87	1907	82	1886	93	1904	99	1914	105	1901	99	1936	93	1931	83	1920	74	1913	56	1894	21
22.....	59	1906	71	1922	82	1907	87	1925	93	1925	96	1911	105	1901	102	1936	93	1930	84	1927	70	1908	58	1933	22
23.....	71	1909	64	1930	85	1910	88	1886	92	1921	99	1930	105	1934	99	1936	92	1937	84	1899	71	1931	65	1933	23
24.....	61	1931	71	1930	81	1929	85	1925	93	1921	98	1931	106	1901	102	1936	92	1891	80	1927	66	1931	65	1889	24
25.....	54	1916	70	1932	81	1907	85	1915	93	1911	100	1931	103	1934	99	1936	92	1891	81	1939	68	1915	62	1936	25
26.....	56	1911	65	1932	82	1907	86	1888	95	1911	102	1934	105	1936	98	1936	93	1897	84	1939	69	1927	62	1907	26
27.....	60	1916	65	1895	81	1910	86	1894	94	1911	104	1934	107	1930	98	1898	90	1891	86	1927	70	1909	61	1889	27
28.....	62	1914	68	1895	83	1910	91	1894	93	1914	104	1934	104	1916	96	1899	89	1929	85	1927	72	1905	61	1908	28
29.....	61	1914	60	1932	86	1895	92	1899	95	1914	105	1936	104	1867	95	1932	89	1905	82	1922	69	1933	62	1936	29
30.....	55	1931	76	1931	86	1910	90	1901	93	1890	103	1931	103	1913	95	1932	91	1933	81	1922	62	1913	60	1896	30
31.....	52	1922	77	1932	77	1893	90	1901	104	1934	103	1931	102	1890	95	1932	91	1933	81	1935	62	1913	60	1896	31

Notes

Temperatures 100° or Higher
At Peoria, 56 Yrs. 1886-1941

On 132 days in 24 summers:-

23 days in 1936
17 days in 1934
11 days in 1887

Other hot summers
avged. 4 days each.

Months having 100° days:-

May, 1 day in 1934
6 Junes had 22 days
17 Julys had 73

10 Augusts had 26
5 Septembers had 11

Longest period in 56 yrs.
with 100° or higher daily:-
14 days, July 4-17, 1936

Hottest month, 86 years:
July, 1936, averaged 84°.

Peoria Illinois 1941

Dates of Killing Frosts and Length of Growing Season

Year	Last killing frost in spring		First killing frost in autumn		Grow'g season number days
1856....	April	13	October.....	1	171
1857....	May	11	October.....	20	162
1858....	April	26	October.....	9	166
1859....	April	23	October.....	9	169
1860....	May	1	October.....	12	164
1861....	April	19	October.....	24	187
1862....	April	6	October.....	24	201
1863....	April	8	October.....	6	181
1864....	April	21	October.....	9	171
1865....	April	24	October.....	28	187
1866....	April	7	October.....	31	207
1867....	May	8	October.....	24	169
1868....	April	18	October.....	8	173
1869....	April	14	October.....	13	182
1870....	April	17	October.....	31	197
1871....	April	1	October.....	28	210
1872....	April	22	October.....	11	172
1873....	April	25	October.....	7	165
1874....	April	29	October.....	12	166
1875....	May	2	October.....	11	162
1876....	April	5	October.....	15	193
1877....	April	5	November	3	212
1878....	March	25	October.....	19	208
1879....	April	5	October.....	24	202
1880....	April	12	October.....	18	189
1881....	April	16	November	9	207
1882....	April	12	November ..	12	214
1883....	April	24	November	1	191
1884....	April	8	October.....	23	198
1885....	April	13	October.....	21	191
1886....	April	6	October.....	2	179
1887....	April	5	October.....	24	202
1888....	April	20	October.....	3	166
1889....	April	6	October.....	7	184
1890....	April	10	October.....	27	200
1891....	April	4	October.....	20	199
1892....	April	10	October.....	24	187
1893....	April	21	October.....	16	178
1894....	April	2	October.....	14	195
1895....	April	2	October.....	9	190
1896....	April	4	October.....	21	200
1897....	April	20	October.....	29	192
1898....	April	6	October.....	26	203
1899....	April	9	September.....	30	174
1900....	April	14	November.....	6	206
1901....	April	21	October.....	5	167
1902....	April	9	October.....	14	188
1903....	April	4	October.....	24	203
1904....	April	21	October.....	23	185
1905....	April	22	October.....	21	182
1906....	May	7	October.....	10	156
1907....	May	4	October.....	13	162
1908....	April	12	October.....	9	180
1909....	April	23	October.....	12	172
1910....	April	24	October.....	23	182
1911....	April	9	October.....	24	198
1912....	April	19	October.....	23	187
1913....	March	28	October.....	21	207
1914....	April	12	October	26	197
1915....	April	4	October.....	9	188
1916....	April	9	October.....	11	185
1917....	April	15	October.....	8	176
1918....	May	1	November.....	1	184
1919....	April	26	October.....	17	174
1920....	April	13	October.....	29	199
1921....	April	18	November	2	198
1922....	April	1	October.....	17	199
1923....	April	17	October	21	187
1924....	April	2	October.....	23	204
1925....	April	5	October.....	10	188
1926....	April	26	October.....	31	188
1927....	April	24	November.....	5	195
1928....	April	28	September ..	26	151
1929....	April	1	October.....	25	207
1930....	March.....	30	October.....	20	204
1931....	April	6	November.....	6	214
1932....	April	13	October.....	30	200
1933....	March.....	28	October	25	211
1934....	April	25	October	28	185
1935....	April	16	October.....	4	171
1936....	April	23	October.....	23	183
1937....	April	11	October.....	14	186
1938....	April	10	October	24	197
1939....	April	13	October.....	14	184
1940....	April	13	November	7	208
1941....	March.....	29	October.....	28	213
Av'age.	April	14	October.....	20	190

Earliest & latest dates in bold-face. Spring; March 25, May 11. Fall; Sept. 22, Nov. 12. Growing season; 151 days in 1928, 214 days in 1931. (See notes, page 9)

AIR CONDITIONING; COOLING

In summer no cooling is needed at 76° or lower, so the cooling count runs from 76° upward. A day averaging 80° counts as 4 degree-days; a day averaging 90° counts as 14 degree-days, etc.

The tables below show the total number of such degree-days that the different months or seasons have given.

Degree-Days, Cooling; 37 Years, 1905 to 1941

Number per Month, May 15th to September 15th
Temperature Argument 76°

Month	Year 1941	Normal 37 years	Greatest of record	Year	Least of record	Year
May 15 to 31st.	20	4.0	25	1911	0	*1905
June	66	36.4	140	1933	0	1907, '28
July	93	78.8	276	1936	14	1924
August	97	50.8	171	1936	4	1927
Sept. 1 to 15th	21	16.2	65	1939	0	*1910
Season ..	296	186.4	524	1936	38	1915

* And other years

5 summers had 300 or more, viz. 1913, 1931, 1933, 1934, 1936.

Their numbers respctly were: 349, 341, 300, 394, 524.

4 summers had less than 80, viz: 1905, 1907, 1915, 1924.

Their numbers respctly were: 71, 59, 38, 57.

21 Mays, 2 Junes, 9 Septembers had no air conditioning days.

Degree-Days, Cooling

Year	May	June	July	Aug.	Sept.	Total	Year	May	June	July	Aug.	Sept.	Total
1905..	0	18	30	23	4	75	1924..	0	9	14	34	0	57
1906..	3	12	17	61	4	98	1925..	2	41	71	25	41	180
1907..	0	0	30	25	4	59	1926..	0	6	69	28	4	107
1908..	0	20	39	32	1	92	1927..	0	12	29	4	41	86
1909..	0	18	19	85	6	128	1928..	0	0	52	46	0	98
1910..	0	33	52	30	0	115	1929..	6	17	42	14	10	89
1911..	25	64	78	19	5	191	1930..	0	31	143	83	13	270
1912..	2	4	44	38	60	148	1931..	1	118	139	47	36	341
1913..	1	75	117	109	47	349	1932..	0	16	86	37	0	139
1914	22	83	110	66	0	281	1933..	0	140	98	21	41	300
1915..	0	2	19	8	9	38	1934..	20	133	170	71	0	394
1916..	2	5	166	103	6	282	1935..	0	7	117	77	1	202
1917	0	6	71	12	0	89	1936..	0	37	276	171	40	524
1918..	11	14	46	96	0	167	1937..	11	28	57	92	22	210
1919	1	48	102	19	16	186	1938..	0	7	55	85	30	177
1920..	0	47	29	18	0	94	1939..	8	36	59	9	65	177
1921..	12	84	129	42	10	277	1940..	0	27	124	71	7	229
1922..	0	31	38	49	61	179	1941..	20	65	93	97	21	296
1923..	0	52	85	34	1	172	---	---	---	---	---	---	---
Averages at right are for 37 years							Avg.	4.0	36.4	78.8	50.8	16.2	186.4

NOTES

The crop season of 1816 was so cool over at least the northern half of the then settled portion of the U.S. that 1816 was called "the year without summer".

The spring seasons of 1857 and 1907 were outstanding for very cool periods of two months or longer.

1859 had widespread damaging frosts in early June from eastern Iowa to New England. Those frosts at Peoria were not recorded as "killing" but newspapers said: "Sharp frost June 4th, but crops generally unhurt". And on June 5th and 6th, "tomatoes, beans, corn, potatoes damaged in Tazewell county; corn set back 10 days".

Cold Waves at Peoria in 60 Years

A cold wave is a rapid and decided drop in temperature to a low figure for the time of year. It usually occurs with a strong wind. The worst instances sometimes drop 40° or more within 24 hours. About one winter in 30 has had no severe cold wave. The average is about 3 to 6 per season. They rarely occur in October or April. November has averaged 3 or 4 in 10 years, March 5 or 6, December 13, February 14, January 22 in a ten year period.

AIR CONDITIONING; HEATING

Note: Heating needed in winter, and cooling in summer, are measured in "degree-days".

A day with outside temperature averaging 65° needs no heat, so the heating count for winter runs from 65° downward. A day averaging 64° counts as 1 degree-day; a day averaging 51° counts as 14 degree-days, and so on.

Degree-Days, Heating; SUMMARY of 37 Years, 1905-1941
 Number per Month, September 15th to May 15th
 Temperature Argument 65°

Month	Season 1940-1941	Normal 37 years	Greatest of record	Year	Least of record	Year
Sept.	95	85	215	1918	21	1933
Oct.	204	350	674	1925	201	1924
Nov.	804	725	952	1911	450	1931
Dec.	964	1109	1420	1909	818	1931
Jan.	1141	1233	1691	1918	851	1933
Feb.	1105	1040	1455	1936	745	1930
Mar.	919	801	1135	1912	482	1910
Apr.	298	439	651	1907	245	1915
May	89	173	322	1917	58	1934
Season	5619	5959	7040	1911-12	4903	1931-32

Degree Days Heating

Year	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Season	Year	Total
1904-05..	....	....	....	....	....	1395	653	436	144	....	1905	....
1906-06..	36	414	752	1093	1081	1066	1107	328	165	6042	1906	4923
1906-07..	31	397	763	1070	1146	1028	621	651	316	6023	1907	6008
1907-08..	119	438	802	1005	1180	1103	705	423	182	5957	1908	6126
1908-09..	69	373	695	1106	1202	927	869	518	206	5965	1909	5836
1909-10..	123	475	512	1420	1263	1154	482	402	279	6110	1910	6252
1910-11..	73	295	891	1227	1169	914	768	503	101	5941	1911	6066
1911-12..	44	429	952	994	1671	1285	1135	406	124	7040	1912	5874
1912-13..	135	328	696	1001	1155	1134	918	406	149	5922	1913	6781
1913-14..	104	426	539	897	1019	1278	873	424	130	5690	1914	5728
1914-15..	68	257	647	1369	1364	828	959	245	223	5960	1915	6065
1915-16..	72	291	640	1155	1171	1176	853	460	172	5990	1916	5777
1916-17..	161	359	677	1233	1257	1238	779	533	322	6559	1917	6262
1917-18..	103	645	692	1397	1691	1040	592	572	99	6831	1918	6966
1918-19..	215	282	693	881	1111	961	749	415	249	5556	1919	6065
1919-20..	37	334	812	1378	1437	1084	725	625	174	6606	1920	6046
1920-21..	47	210	791	1057	1015	855	555	335	149	5014	1921	6150
1921-22..	23	294	752	1016	1281	983	739	378	66	5532	1922	4994
1922-23..	58	275	639	1120	1028	1172	960	468	169	5889	1923	5539
1923-24..	73	449	670	835	1427	1074	934	363	302	6127	1924	5824
1924-25..	157	201	717	1344	1286	896	736	253	263	5853	1925	6519
1925-26..	29	674	817	1230	1179	885	1020	635	120	6589	1926	6184
1926-27..	110	410	861	1186	1289	806	679	431	193	5965	1927	6406
1927-28..	90	244	652	1215	1193	952	768	522	98	5734	1928	5599
1928-29..	191	296	697	1021	1462	1229	600	371	249	6116	1929	5738
1929-30..	95	377	831	1141	1493	745	816	335	136	5969	1930	6365
1930-31..	48	410	680	1092	1004	792	874	386	255	5541	1931	5755
1931-32..	56	225	450	818	987	817	1029	410	111	4903	1932	4860
1932-33..	93	389	867	1155	851	1069	798	432	134	5788	1933	5858
1933-34..	21	412	765	1005	1034	1153	960	406	58	5814	1934	5487
1934-35..	108	244	574	1208	1205	941	642	510	288	5720	1935	5745
1935-36..	94	346	791	1297	1481	1455	717	521	72	6774	1936	6114
1936-37..	58	350	815	967	1277	1039	892	465	137	6000	1937	6436
1937-38..	115	427	853	1186	1205	807	544	377	161	5675	1938	6391
1938-39..	81	206	665	1088	1019	1050	749	527	92	5477	1939	5134
1939-40..	49	305	715	965	1602	1030	903	456	218	6243	1940	5471
1940-41..	95	204	804	964	1136	1105	919	298	89	5619	1941	6271
1941-42..	61	243	660	886	....	....	....	....	....	....		
Average	85	350	725	1062	1233	1040	919	439	173	5959		

Computed on base temperature of 65°.

NORMAL TEMPERATURES 50 Yrs., AND DAILY SUNSHINE 1941

Normal Temperatures													Daily Percent of Sunshine 1941											
Day	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct.	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct.	Nov	Dec
1.....	24	23	30	44	57	67	74	75	69	59	44	32	0	94	83	24	28	11	100	100	100	58	0	24
2.....	24	23	31	45	57	67	74	75	69	58	44	32	65	88	41	17	100	47	46	100	3	100	0	0
3.....	23	24	31	46	57	68	75	75	68	58	43	32	99	85	5	0	100	0	44	100	71	1	87	0
4.....	23	24	32	46	58	68	75	75	68	57	43	31	70	0	100	0	100	100	100	48	0	25	37	48
5.....	23	24	31	46	57	68	75	75	68	57	42	31	100	53	84	7	71	100	73	80	100	0	18	18
6.....	23	24	32	47	58	69	75	75	67	57	42	31	0	17	37	16	15	100	100	65	3	0	100	100
7.....	23	24	33	47	58	69	75	74	67	56	41	31	28	56	76	62	82	64	100	20	91	0	57	57
8.....	23	24	33	48	59	69	75	74	67	56	41	30	0	47	100	90	82	76	77	70	100	0	39	39
9.....	23	24	34	48	59	69	75	74	67	55	40	30	62	72	88	12	10	81	65	2	0	0	100	100
10.....	23	25	34	49	60	70	75	74	66	55	40	30	71	100	0	92	83	23	81	100	0	0	99	99
11.....	23	25	34	49	60	70	75	74	66	55	39	30	56	79	21	69	97	85	100	96	100	0	0	0
12.....	23	25	35	50	60	70	75	73	65	54	39	29	100	41	66	100	78	12	50	100	100	87	0	0
13 ..	23	25	35	50	61	71	76	73	65	53	38	29	0	0	100	63	100	58	56	100	54	19	62	62
14.....	23	25	36	50	61	71	76	73	65	53	38	29	0	40	100	47	35	98	47	71	0	83	84	84
15.....	23	26	36	51	61	71	76	73	65	53	37	29	0	89	8	63	80	80	57	22	52	100	0	0
16.....	23	26	37	51	62	71	76	73	64	52	37	28	0	0	68	16	47	73	70	0	100	0	77	77
17.....	23	26	38	52	62	72	76	72	64	52	37	28	100	97	59	49	100	100	73	7	100	29	100	92
18.....	23	27	38	52	63	72	76	72	63	51	36	28	47	100	88	13	100	100	100	100	35	7	99	99
19.....	23	27	38	52	63	72	76	72	63	51	36	27	100	100	77	76	96	97	68	100	59	80	100	100
20.....	23	27	39	53	63	72	76	72	63	50	35	27	66	100	100	100	72	83	43	100	49	100	79	79
21.....	23	27	39	53	63	72	76	72	62	50	35	27	0	100	100	100	100	100	99	100	22	0	0	0
22 ..	23	27	40	54	64	73	76	71	62	49	34	26	3	88	75	77	100	81	62	100	80	57	59	59
23.....	23	28	40	54	64	73	76	71	62	49	34	26	79	7	43	100	100	71	23	60	66	100	0	0
24.....	23	28	41	54	65	73	76	71	61	48	34	26	0	86	100	100	80	93	88	100	100	100	0	0
25.....	23	29	41	55	65	73	76	71	61	48	33	25	0	18	52	100	100	97	72	8	0	100	3	3
26.....	23	29	42	55	65	73	76	71	61	47	33	25	33	30	23	100	99	75	46	32	5	100	0	0
27.....	23	29	42	56	65	73	75	70	60	47	33	25	0	100	10	100	100	81	100	0	92	100	0	0
28.....	23	30	43	56	65	74	75	70	60	46	32	25	0	..	100	100	78	100	98	11	2	100	58	58
29.....	23	30	43	57	66	74	75	70	60	46	32	24	0	..	100	100	60	84	100	7	0	0	0	0
30.....	23	..	44	57	66	74	75	69	59	45	..	24	76	..	6	100	69	87	97	..	0	..	0	0
31.....	23	..	44	..	67	..	75	69	..	45	..	24	100	..	5	..	69	100	72	..	0	..	0	0
Mean	23.1	25.9	37.0	50.9	61.7	70.9	75.4	72.5	64.3	52.0	37.5	28.1	42	64	62	59	78	67	79	75	63	43	56	40

50-Yr. averages for each day, computed and smoothed.

SOIL TEMPERATURES IN ILL.

(Recorded by College of Agr., Ill. Univ., Urbana, Ill. in 1941)

AVERAGE DAILY MAXIMUM												AVERAGE DAILY MINIMUM											
Depth in inches	May	June	July	Aug.	Sept.	Oct.	Season	May	June	July	Aug.	Sept.	Oct.	Season	May	June	July	Aug.	Sept.	Oct.	Season	May	June
2.....	68	77	83	82	74	62	72	68	74	79	78	72	61	69	64	74	79	79	73	62	69	64	72
4.....	64	74	80	78	72	61	69	63	73	79	79	73	62	69	59	68	73	73	69	62	65	69	72
8.....	63	73	79	79	73	62	69	59	67	75	75	69	60	65	58	67	72	70	65	57	62	63	72
12.....	59	67	72	73	69	60	64	58	66	71	71	68	59	63	58	66	71	71	68	59	63	68	71

AVGE. DAILY RANGE											
2.....	9	11	12	8	5	9		9	7	8	7
4.....	6	7	8	8	7	4		7	4	8	4
8.....	3	3	4	4	4	2		3	4	4	4
12.....	1	1	1	2	1	1		1	1	1	1

Average Air Temperatures at Urbana Ill.
(For comparisons)

Temp.	66	73	75	74	69	59	..
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NOTES: In every summer month the air becomes warmer by day and cooler at night than the soil.
The daily average temperature in the air ranges 21° between day and night; in the top soil only 9°; at 12 inch depth only 1° range. The soil was warmest through the night at the 8-inch depth.

PEORIA WINDS; CITY OFFICE AND AIRPORT

AVERAGE HOURLY VELOCITY, 32 YEARS, CITY OFFICE

Month	A.M.												P.M.												Avg
	1	2	3	4	5	6	7	8	9	10	11	N	1	2	3	4	5	6	7	8	9	10	11	M	
January	7.6	7.5	7.5	7.5	7.4	7.4	7.4	7.4	8.0	8.8	9.3	9.6	10.3	10.0	9.9	9.1	8.4	7.8	7.9	7.9	7.9	7.7	7.7	8.2	8.2
February	7.6	7.5	7.4	7.4	7.4	7.4	7.5	7.8	8.7	9.4	10.0	10.1	10.6	10.7	10.8	10.4	9.6	8.5	8.1	8.0	8.1	8.1	8.0	7.7	8.6
March	7.9	7.7	7.6	7.7	7.7	7.6	7.7	7.5	9.6	10.3	10.8	11.2	11.7	11.8	11.8	11.9	10.8	9.3	8.1	8.0	8.0	8.1	7.9	9.1	9.1
April	7.4	7.3	7.3	7.2	7.3	7.4	7.9	7.6	10.0	10.6	11.0	11.4	11.8	11.8	11.7	11.5	10.7	9.8	7.7	7.3	7.4	7.2	7.5	7.5	9.0
May	5.6	5.4	5.4	5.1	5.2	5.4	6.3	7.3	8.2	8.8	9.4	9.7	10.0	9.9	9.9	9.6	9.1	7.6	6.4	5.6	5.5	5.7	5.8	5.7	7.0
June	4.5	4.4	4.3	4.2	4.2	4.4	5.3	6.0	6.6	7.3	7.7	7.9	8.2	8.3	8.2	8.1	6.7	5.4	4.6	4.6	5.7	4.8	4.6	4.6	5.8
July	3.7	3.6	3.5	3.4	3.4	3.4	4.1	4.9	5.6	6.1	6.6	6.5	7.1	7.2	7.2	7.1	6.7	5.8	4.6	3.8	3.8	3.8	3.7	4.8	4.8
August	3.6	3.6	3.5	3.4	3.4	3.3	3.7	4.0	5.1	5.7	6.1	6.3	6.5	6.6	6.6	6.4	5.9	4.9	3.7	3.4	3.5	3.7	3.8	3.7	4.6
September	4.1	4.1	3.9	3.9	3.8	3.8	4.0	4.5	5.8	6.4	6.9	7.2	7.5	7.4	7.3	7.0	6.2	4.7	3.9	4.1	4.2	4.3	4.3	4.3	5.2
October	4.9	4.7	4.8	4.7	4.7	4.7	5.4	6.5	7.3	7.8	8.2	8.6	9.0	8.5	8.3	7.7	6.4	5.0	4.8	5.0	5.2	5.1	5.0	6.0	6.0
November	6.7	6.6	6.5	6.5	6.5	6.5	6.7	7.0	8.0	8.8	9.5	9.8	10.2	10.0	9.8	9.0	7.7	7.0	7.1	7.2	7.1	7.0	6.9	7.7	7.7
December	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.9	7.5	8.3	8.8	8.1	9.4	9.2	9.1	8.5	7.6	7.2	7.3	7.4	7.3	7.2	7.0	7.6	7.6
Mean	5.9	5.8	5.7	5.6	5.6	5.7	6.0	6.5	7.5	8.2	8.7	8.9	9.3	9.3	9.2	8.9	8.1	7.0	6.2	6.0	6.0	6.1	6.0	7.0	7.0

WINDS FROM 8 DIRECTIONS; at CITY OFFICE; 14 YEARS
AVERAGE VELOCITY. AVERAGE NUMBER OF HOURS PER YEAR

Month	N		NE		E		SE		S		SW		W		NW		Calm	
	mi.	hrs.	mi.	hrs.	mi.	hrs.	mi.	hrs.	mi.	hrs.	mi.	hrs.	mi.	hrs.	mi.	hrs.		
January ..	6.3	74	6.1	50	6.2	45	6.7	77	7.7	154	7.9	85	8.4	128	7.9	128	2.6	
February ..	6.7	92	7.7	66	6.9	46	6.3	64	7.7	118	8.0	57	8.1	107	7.8	127	2.7	
March	7.4	98	9.4	96	7.7	47	7.5	84	8.1	123	9.2	50	9.8	94	8.7	149	2.9	
April	6.6	74	8.5	107	7.9	76	7.0	86	7.8	119	8.8	58	9.4	82	8.6	111	6.2	
May	5.9	65	6.7	106	5.7	66	5.8	85	6.7	139	7.7	93	6.7	81	6.4	95	14.7	
June	4.8	54	5.7	88	4.7	51	5.0	82	5.9	143	6.6	118	6.1	77	5.2	86	21.5	
July	4.5	73	5.1	103	4.2	55	3.8	69	4.9	133	5.7	132	4.5	62	4.6	83	32.8	
August	4.2	82	4.8	115	4.3	77	4.1	93	4.9	130	5.1	85	4.3	52	4.2	74	35.9	
September ..	4.8	66	5.2	97	4.3	62	4.4	91	5.5	164	6.1	92	5.6	60	5.2	67	20.3	
October	4.8	74	4.8	56	4.6	56	5.2	81	5.7	165	6.0	84	6.3	92	5.8	112	18.4	
November ...	6.6	51	6.8	46	6.2	35	6.6	81	7.6	175	8.5	86	8.4	103	7.5	126	6.7	
December ...	6.5	75	7.2	54	7.0	45	6.4	93	6.9	146	7.3	89	8.6	121	7.5	117	3.2	
Ave. Yr Vel	5.8		6.6		5.8		5.7		6.5		7.2		7.2		6.6		0	
Total hours	888		985		661		996		1709		1029		1055		1275		168	

PEORIA AIRPORT STATION; 24,847 Observations, 1936-38
Totals and Percentage, for 16 Directions and Four Speeds

Miles per Hour	n	ne	ene	e	ese	se	sse	s	ss	sw	Wsw	w	Ww	nw	nww	Total Obs.	%	
4-15	1046	664	1703	763	764	600	1569	1676	1983	1426	1955	535	962	740	1819	743	18948	76
16-31	31	126	223	63	41	54	86	196	172	257	345	236	357	322	410	155	3134	13
32-47	—	—	3	—	—	—	—	—	—	2	7	6	3	11	5	1	38	6
Over 47	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	0
(alm	.....	.....	(Includes 0 to 3 m.p.h. No direction assigned)													.....	2727	11
Total	1137	790	1929	826	805	654	1655	1872	2155	1685	2307	777	1322	1073	2234	899	24847	100
Obs.																		
Per-																		
cent	5	3	8	3	3	3	7	7	9	7	9	3	5	4	9	4	11	

Note: 0 indicates less than .5 of 1%.

City Office, 14 Years
Ave. Hrs. per Year at 5 Speeds

Miles Per-Hour	0-6	7-10	11-15	16-21	22-31
January	300	291	136	16	1
February	284	258	122	13	0.5
March	226	298	194	24	1.6
April	276	270	152	21	1.2
May	392	271	76	5	.2
June	473	215	31	1	...
July	558	172	14	...	...
August	571	162	11	...	...
September	498	199	22	1	...
October	464	220	56	4	...
November	310	259	137	13	1.1
December	332	294	105	13	...
Yearly Hours ...	4684	2909	1056	111	5.6
Ave. % of time	54	32.5	12	1.3	0.7

Peoria Illinois 1941

Normal Daily Precipitation

Averaging a long enough record of rain would give daily amounts at Peoria about as follows.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1 ..	07	05	05	08	11	11	10	09	12	11	07	07
2....	07	07	06	09	11	12	10	08	14	08	07	06
3....	08	07	06	10	10	13	10	07	14	08	07	06
4....	07	07	06	10	10	12	10	07	14	08	07	06
5....	06	07	07	10	10	12	12	08	12	03	08	05
6....	05	07	08	10	10	12	13	09	12	06	10	05
7....	05	05	08	10	10	12	15	10	13	06	10	05
8....	05	06	08	10	10	13	16	12	14	07	10	05
9....	05	06	11	10	11	13	15	13	14	07	11	06
10....	07	07	11	11	13	12	16	12	14	06	09	06
11 ..	08	07	10	10	14	14	14	14	13	07	08	06
12....	07	08	10	10	14	14	13	14	13	07	08	06
13....	06	08	09	11	13	12	11	15	13	06	08	06
14....	06	07	06	12	11	12	11	15	13	06	08	06
15....	05	07	06	12	10	12	11	15	12	08	09	06
16 ..	04	07	07	13	13	10	13	14	13	09	08	06
17....	05	06	09	14	13	10	13	14	14	09	08	07
18 ..	08	08	10	14	14	12	12	12	13	09	08	07
19....	08	09	11	13	15	12	13	12	15	09	07	06
20....	08	09	11	13	14	12	10	11	15	08	07	06
21....	09	08	10	12	11	13	08	10	14	03	06	06
22 ..	08	08	09	12	12	17	08	09	13	08	06	05
23 ..	05	09	10	12	14	16	09	07	12	08	07	05
24....	05	08	11	12	15	15	03	07	12	08	07	05
25....	04	07	12	12	17	15	08	07	14	07	07	05
26....	02	03	12	12	19	16	11	06	15	06	08	05
27....	03	07	11	12	21	11	11	06	15	06	09	05
28....	03	06	09	12	18	10	11	06	15	06	08	05
29....	04	06	08	11	15	11	12	06	14	06	07	05
30....	04	..	08	11	14	11	13	07	12	06	07	06
31....	04	..	08	..	13	..	11	10	..	07	..	06
Mean	1.78	2.07	2.73	3.38	4.06	3.77	3.58	3.12	4.03	2.29	2.37	1.77

Daily River Stages, 1941 (Mean for 1941, 12.0 ft.)

1....	11.6	11.2	10.7	11.8	11.8	11.7	12.0	11.7	11.8	11.6	12.6	12.5
2....	11.7	11.2	10.7	11.8	11.8	12.0	12.0	11.8	11.7	11.8	13.4	12.3
3....	11.8	11.2	10.6	12.0	11.7	12.1	11.9	11.6	11.6	11.8	14.0	12.1
4....	11.8	11.1	11.1	12.0	11.5	11.9	11.8	11.6	11.5	11.5	14.6	11.8
5....	12.1	10.9	11.3	12.1	11.5	11.9	11.6	11.7	11.7	11.7	15.0	11.2
6....	12.1	10.9	11.5	11.9	10.9	12.0	11.8	11.8	11.8	12.2	15.4	11.7
7....	11.9	10.8	11.7	11.5	11.4	11.6	11.8	11.7	11.7	12.9	15.2	11.4
8....	11.9	10.7	11.7	11.3	11.3	11.8	11.9	11.6	11.4	13.9	15.2	11.1
9....	11.9	10.6	11.7	11.2	11.8	11.9	11.6	11.7	11.6	14.9	15.3	11.1
10....	11.8	10.6	11.9	11.0	11.7	12.0	11.4	11.8	11.7	15.9	15.5	11.1
11 ..	11.8	10.6	11.6	11.5	11.9	11.6	11.6	11.5	11.7	16.2	15.6	11.9
12....	11.8	10.7	12.0	11.6	11.7	11.6	11.8	11.9	11.7	16.5	15.5	11.7
13....	11.8	11.0	12.2	11.5	11.8	11.6	11.7	11.8	11.6	16.5	15.3	11.8
14....	11.9	11.6	12.2	11.2	11.0	11.6	11.5	11.7	11.5	16.3	15.3	11.8
15....	11.8	12.1	11.9	11.4	11.5	11.4	11.6	11.7	11.4	16.2	15.0	11.4
16....	11.8	11.9	11.6	11.6	11.7	11.3	11.6	11.8	11.8	16.1	14.8	11.4
17....	11.8	11.6	11.8	11.6	12.1	11.2	11.5	11.7	11.8	15.7	14.5	11.6
18 ..	11.6	11.2	11.4	11.6	11.6	11.0	11.5	11.7	11.8	15.3	14.1	11.6
19....	11.6	11.4	11.0	11.4	11.6	10.8	11.6	11.6	11.7	15.0	13.7	11.6
20....	11.6	11.4	11.6	10.9	11.5	11.3	11.6	11.6	11.7	14.6	13.8	11.6
21....	11.6	11.3	12.0	11.6	11.5	11.4	11.6	11.6	11.7	14.3	13.7	11.6
22 ..	11.6	11.3	12.1	11.8	11.4	11.6	11.5	11.7	11.7	14.1	13.7	11.5
23....	11.8	11.2	12.1	11.9	11.5	11.7	11.7	11.8	11.8	13.9	13.8	11.6
24....	11.8	11.0	12.2	11.9	11.2	11.6	11.8	11.8	11.8	13.7	13.5	11.9
25....	11.7	11.0	12.0	11.8	11.3	11.5	11.8	11.4	11.9	13.5	13.1	11.8
26 ..	11.7	11.0	11.9	11.7	11.2	11.5	11.6	11.7	11.6	13.2	13.2	11.6
27....	11.6	10.9	11.7	11.5	11.1	11.5	11.5	11.7	11.4	13.2	13.0	11.8
28....	11.6	10.7	11.6	11.3	11.1	11.6	11.5	11.6	11.5	13.4	12.9	11.5
29 ..	11.4		11.6	11.1	11.3	11.6	11.6	11.6	11.6	13.3	12.7	11.4
30....	11.3		11.5	11.6	11.3	11.8	11.8	11.6	11.4	13.2	12.6	11.2
31....	11.3		11.6		11.3		11.8	11.4		13.3		11.3
Mean	11.7	11.1	11.6	11.6	11.4	11.6	11.7	11.7	11.7	14.1	14.2	11.6

River stages of early years were raised somewhat by dikeing for drainage districts. The monthly averages for 1867-1899 were:-

6.5 8.5 11.8 11.1 9.0 7.6 6.0 3.9 3.4 3.6 4.4 4.7; An'l 6.8

The monthly averages since opening of Chicago Drainage Canal in 1900 were:- 12.3 13.5 15.4 15.8 14.1 12.9 11.5 10.5 10.4 10.8 10.9 11.7; An'l 12.5

The pooling of the entire river at a 9 foot low-water depth, by a series of dams, completed near Peoria in 1938, is shown by the above table of 1941 stages

Notes

Very high water is reported here in 1831, 1838, 1844, 1849; the highest being 26.9 ft. in June 1844. 25.0 ft. occurred in Oct. 1926; and 25.4 May 18, 1933.

Low readings were noted in 1838, 1845, 1852, 1867, and in 1871, 1873, and 1874; the lowest being in 1871, when, it is said, the stream at Peoria could be crossed on stepping stones with dry shoes.

Zero of the present river gage is at 428.54 ft. above Mean Gulf Level. and is said to mark the low water level of 1871.

Peoria Illinois 1941

Monthly and Annual Precipitation
Peoria, Illinois

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept.	Oct	Nov	Dec	An'l
1855..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.76	.....
1856..	0.80	1.03	0.25	0.86	4.08	1.50	2.83	1.39	0.78	1.66	4.00	6.13	25.31
1857..	0.37	5.33	3.84	1.39	2.80	2.77	1.40	5.61	2.16	2.01	1.35	1.50	30.53
1858..	1.48	1.95	3.28	6.25	10.64	5.95	5.75	3.24	2.96	3.24	4.85	3.67	53.26
1859..	1.50	1.42	5.83	2.60	3.17	2.18	0.67	4.14	2.84	2.15	2.40	1.23	30.13
1860..	1.86	2.40	1.13	1.64	2.00	4.95	8.87	2.39	2.11	0.70	3.13	3.08	34.26
1861..	1.25	2.46	3.96	4.95	2.19	2.31	2.31	2.78	3.72	2.33	1.09	0.94	30.29
1862..	4.27	0.70	2.71	5.03	1.46	3.67	7.74	9.04	5.09	1.61	1.81	5.20	48.33
1863..	2.83	3.20	2.60	1.52	2.97	0.45	4.82	2.24	2.51	3.92	0.71	4.49	32.26
1864..	1.42	0.41	2.20	4.81	1.88	2.55	2.92	1.56	4.71	1.53	3.82	3.06	30.87
1865..	0.22	4.01	3.57	4.27	2.34	1.86	5.77	3.61	8.31	1.67	0.31	1.06	37.00
1866..	3.21	1.10	2.54	2.65	2.57	2.61	5.17	3.97	6.50	2.87	0.51	2.05	35.75
1867..	1.36	2.88	1.74	1.57	4.40	2.92	2.65	2.26	0.60	1.10	1.93	1.21	24.62
1868..	0.77	0.75	5.38	3.18	7.85	1.43	1.47	2.74	4.46	1.41	4.50	1.81	35.75
1869..	0.99	2.62	1.71	3.59	6.09	8.35	7.35	3.39	0.74	1.53	3.13	2.63	42.12
1870..	2.05	0.33	4.37	0.45	1.62	0.75	0.68	3.26	3.56	4.27	1.21	1.12	23.67
1871..	2.45	1.62	3.24	2.58	1.93	3.47	4.03	4.95	0.65	3.37	2.09	2.04	32.42
1872..	0.20	0.69	2.53	2.95	2.38	9.76	7.80	4.54	4.13	0.80	2.00	1.07	38.85
1873..	3.47	1.29	1.30	4.76	4.78	2.96	4.25	1.25	3.65	2.26	1.46	7.15	38.58
1874..	3.04	1.45	1.11	2.90	2.51	1.95	1.46	5.60	1.15	1.00	2.20	0.67	25.04
1875..	0.32	2.20	2.05	2.00	4.23	3.00	8.22	1.02	9.61	3.46	0.71	2.39	39.27
1876..	2.63	2.00	4.70	2.66	3.94	6.17	5.54	3.14	4.51	4.86	2.33	0.28	43.06
1877..	0.92	0.06	3.32	2.86	2.57	9.43	3.01	2.04	2.83	5.68	3.65	3.45	39.82
1878..	0.50	2.25	2.10	3.75	4.45	3.94	2.58	4.42	0.97	3.96	0.91	2.08	31.91
1879..	1.05	0.97	1.80	2.95	0.93	3.23	3.42	1.88	3.72	2.17	4.93	1.92	28.97
1880..	3.38	3.95	3.30	5.94	6.73	2.32	3.17	3.38	3.09	1.75	1.92	0.96	39.89
1881..	0.52	3.51	3.52	1.62	3.60	7.20	2.43	1.38	4.05	5.56	4.26	3.50	41.15
1882..	1.27	3.21	3.12	2.41	6.34	11.18	2.91	1.92	1.43	3.76	2.08	1.76	41.39
1883..	1.31	4.14	0.77	6.18	6.54	4.39	3.57	0.57	2.98	3.57	4.19	1.37	39.53
1884..	0.70	3.18	2.17	2.62	5.50	3.87	3.67	4.13	5.76	4.80	2.19	3.21	41.80
1885..	2.63	2.24	0.87	4.44	1.70	4.07	8.73	2.64	5.28	2.32	1.04	2.44	32.40
1886..	2.41	1.86	2.25	2.75	2.90	3.67	0.47	3.30	4.68	1.81	1.34	0.89	28.33
1887..	1.10	5.45	0.94	1.53	1.24	1.53	2.85	2.72	2.53	2.14	1.62	3.65	27.30
1888..	1.87	1.66	4.03	1.18	6.72	1.84	6.48	2.30	4.79	2.29	2.67	2.39	38.22
1889..	1.70	0.84	1.50	2.79	3.92	6.48	7.64	1.23	2.61	2.28	2.91	1.33	35.23
1890..	2.80	1.36	2.73	2.33	2.74	2.42	0.72	2.39	2.12	3.45	1.79	0.41	25.26
1891..	1.69	1.90	2.68	3.64	1.97	3.31	2.82	5.71	2.00	0.71	4.08	2.40	32.91
1892..	1.25	1.78	2.45	4.54	7.70	6.05	3.08	0.73	2.35	1.20	2.72	1.75	35.60
1893..	1.15	2.92	3.01	7.86	4.65	1.82	2.48	0.44	3.02	0.70	2.21	1.74	32.00
1894..	2.60	1.48	3.06	2.22	3.58	4.18	1.00	2.50	4.42	1.45	2.92	1.58	30.99
1895..	1.32	0.37	1.02	2.89	1.84	1.67	8.72	2.27	4.92	0.67	4.17	5.86	35.72
1896..	1.30	1.95	1.05	4.47	5.74	2.23	7.02	4.69	4.86	0.23	2.20	0.40	36.14
1897..	5.39	1.19	4.70	2.87	1.29	2.11	4.65	1.02	0.93	0.04	3.48	1.16	28.83
1898..	4.08	2.59	5.74	3.02	5.54	3.37	0.47	3.26	6.05	3.00	2.03	0.93	40.08
1899..	0.72	1.96	2.97	1.36	6.03	2.60	1.69	1.27	5.24	2.78	2.25	2.12	30.99
1900..	1.92	5.64	1.42	1.09	5.54	1.44	2.45	5.39	2.94	2.90	1.87	0.39	32.99
1901..	1.98	1.24	4.31	0.81	1.50	4.32	3.97	1.29	2.64	0.90	0.80	2.26	26.02
1902..	0.62	1.41	2.71	2.29	2.99	9.60	7.30	7.42	6.84	3.78	2.83	1.54	49.33
1903..	0.89	1.70	3.66	5.15	4.22	2.39	4.91	7.22	5.78	2.13	0.85	0.95	39.85
1904..	1.87	1.29	4.42	3.48	4.06	2.44	5.58	4.13	6.67	0.10	0.12	1.33	35.49
1905..	1.15	1.45	2.00	3.99	4.53	5.13	4.24	1.36	1.78	2.77	2.45	1.60	32.45
1906..	1.70	1.85	2.55	2.77	2.88	3.24	2.48	1.59	4.92	1.00	2.42	1.65	29.05
1907..	5.39	0.14	2.34	2.82	2.08	3.99	4.89	6.60	2.94	0.35	1.68	1.66	34.88
1908..	0.59	3.98	2.50	4.08	7.76	4.09	3.94	2.78	0.82	0.71	1.80	0.82	33.96
1909..	1.55	3.67	1.81	7.17	3.72	3.56	4.57	0.79	3.68	3.59	5.53	2.50	42.14
1910..	1.97	1.10	0.52	3.56	4.49	0.78	3.23	0.68	3.12	1.69	0.79	1.25	23.18
1911..	2.37	2.39	2.64	2.69	1.03	6.64	2.58	1.73	12.30	2.65	3.01	2.13	42.16
1912..	0.35	1.21	2.03	6.88	4.39	1.86	5.04	1.67	3.54	4.03	1.56	1.13	33.69
1913..	2.18	3.00	3.46	3.54	1.85	2.50	0.46	2.87	2.58	3.11	2.77	0.74	29.06
1914..	1.93	1.36	1.60	2.10	2.28	2.45	0.82	2.40	5.55	2.15	0.20	1.81	24.65
1915..	1.89	2.71	0.67	1.60	11.49	2.08	6.91	4.78	4.88	0.55	2.29	1.66	41.51
1916..	5.95	0.29	2.33	1.60	7.51	2.55	1.14	6.03	3.73	2.93	1.88	1.75	37.69
1917..	1.86	0.27	2.26	4.54	2.40	7.43	1.92	3.36	3.14	2.23	0.07	0.63	30.11
1918..	1.58	1.64	0.91	3.70	3.02	4.69	3.46	5.88	1.67	2.97	3.18	2.80	35.50
1919..	0.07	2.32	4.52	2.35	3.79	3.96	3.09	4.73	3.40	2.12	2.91	0.30	33.64
1920..	0.93	0.27	5.84	6.12	3.03	2.18	1.56	1.87	1.84	1.93	1.22	1.87	28.66
1921..	1.39	0.29	4.89	6.36	2.13	2.17	3.95	3.86	4.86	2.97	3.43	2.91	39.21
1922..	1.69	1.98	5.09	3.62	4.60	0.99	3.06	0.72	2.71	2.02	3.67	1.38	31.53
1923..	1.10	0.83	4.08	1.95	5.15	2.09	1.35	2.84	5.28	3.85	1.37	2.21	32.10
1924..	1.72	1.64	2.28	2.13	1.91	8.08	5.59	7.15	3.74	1.27	0.52	2.40	38.43
1925..	0.48	1.99	1.58	1.68	1.53	3.15	3.93	4.27	4.99	2.49	2.70	1.12	29.91
1926..	1.39	2.42	2.35	2.60	2.18	5.63	5.94	6.79	11.55	2.62	5.41	1.12	50.00
1927..	1.76	2.85	4.55	4.87	9.22	5.71	4.94	1.45	5.82	4.20	3.38	2.91	51.66
1928..	0.36	1.73	0.96	2.84	3.21	6.60	4.35	3.62	3.18	3.66	3.97	2.53	37.01
1929..	3.98	0.58	4.57	4.56	5.03	4.44	5.76	3.02	1.04	3.89	1.72	1.07	39.66
1930..	2.81	2.10	1.55	3.58	1.07	2.53	1.02	1.56	1.31	3.14	3.07	0.29	24.03
1931..	0.48	0.83	2.50	2.23	5.14	2.29	5.91	2.49	4.92	3.15	5.55	2.26	37.75
1932..	2.51	1.40	2.51	1.99	3.61	4.75	3.41	3.14	1.78	3.18	0.94	4.46	33.68
1933..	1.69	1.33	4.70	3.05	7.97	1.15	1.93	2.66	5.92	2.23	0.26	1.18	34.07
1934..	1.05	0.77	1.76	1.13	0.47	2.82	5.44	2.30	6.57	1.97	4.81	1.34	30.43
1935..	1.93	2.83	3.32	2.91	8.58	6.62	2.64	0.98	3.33	1.59	4.03	1.39	40.15
1936..	1.79	1.63	1.80	1.64	1.72	0.45	1.24	2.27	10.58	3.35	1.18	3.26	30.91
1937..	2.86	2.46	1.02	4.42	3.22	4.87	2.32	1.55	1.14	2.69	1.28	2.06	29.81
1938..	4.32	2.21	4.42	3.80	5.72	6.76	6.34	3.01	2.12	0.84	1.65	1.43	42.62
1939..	3.40	2.88	3.24	5.16	4.48	5.53	4.80	2.38	0.85	3.80	1.14	0.61	38.27
1940..	0.84	0.86	2.10	3.85	3.55	3.30	0.50	3.29	1.16	3.13	1.89	1.67	26.14
1941..	3.56	1.01	1.86	4.40	5.64	3.16	1.89	2.07	4.87	10.53	2.02	1.38	42.39
Av'g.	1.85	1.92	2.74	3.24	3.97	3.78	3.78	3.07	3.84	2.49	2.35	2.02	35.01

Note: May was driest in 1934 Oct. wettest in 1941. (the table to 1910 is a plate and boldface entries could not be changed.)

HEAVIEST RAINS

1896-1941 [24 hour amounts 1873-1941]

Maximum amounts in-

Month	5 min.	10 min.	15 min.	30 min.	1 hour	2 hours	In 24 hours		
							Amt.	Date	
January.....	.27	.35	.41	.46	.54	.74	3.15	23-24	1938
February.....	.29	.46	.52	.60	.72	.77	3.16	5-6	1942
March.....	.34	.53	.73	1.03	1.23	1.49	3.29	28-29	1859
April.....	.56	.74	.82	1.33	1.57	1.76	2.69	19-20	1905
May.....	.50	.81	.96	1.54	2.28	3.14	5.52	18	1927
June.....	.48	.88	1.13	1.78	2.23	2.38	4.74	24	1911
July.....	.57	.94	1.29	2.10	2.60	2.61	4.09	17	1895
August.....	.73	.95	1.01	1.41	1.80	2.15	4.49	31-1	1926
September.....	.43	.70	.98	1.56	2.24	3.18	3.63	21	1888
October.....	.44	.60	.80	.85	1.07	1.48	2.69	6-7	1930
November.....	.30	.41	.52	.81	1.07	1.22	3.00	27	1858
December.....	.17	.27	.32	.42	.55	.95	2.60	18-19	1895
Extremes.....	.73	.95	1.26	2.10	2.60	3.18	5.52		
Month & Date..	8-17	8-17	7-2	7-2	7-2	9-10	5-18		
Year.....	1925	1925	1931	1931	1931	1911	1927		

On Sept. 6, 1911 .12 fell in 1 min. and .27 in 3 min.; 3.10 fell during night A. M. to 7:10 A. M., Sept. 21, 1888.; 4.02 fell between 6:09 A. M. and 1:00 P.M. July 17, 1895; 10 to 14 inches fell in and near northern Peoria in about 4 hrs. on May 26, 1922.

NUMBER OF HEAVY RAINS, PEORIA.- 61 yrs.

Amounts in 24 hours or less. [1856-1860 and 1886-1941]

Month	J	F	M	A	M	J	J	A	S	O	N	D	Sum	Avg Per Year
Depth														
1 to 2 ins.	17	16	29	42	59	47	52	41	62	28	28	17	438	7.2
2 to 3 "	3	2	9	5	8	10	12	12	16	4	4	2	81	1.3
3 to 4 "	1	0	0	0	0	2	4	1	4	0	1	0	13	0.2
Over 4 "	0	0	0	0	2	2	1	1	0	0	0	0	6	0.1
Total	21	18	38	47	69	61	69	55	76	33	32	19	538	8.8

IS THE RAINFALL CHANGING?**Peoria Records of 5-, 10-, 21-, 43-year, Periods****5 Year Averages**

1856-1859.....	*34.81
1860--1864.....	35.20
1865-1869.....	35.05
1870-1874.....	31.71
1875-1879.....	36.61
1880-1884.....	40.75
1885-1889.....	32.50
1890-1894.....	31.35
1895-1899.....	34.35
1900-1904.....	36.74
1905-1909.....	34.50
1910-1914.....	30.55
1915-1919.....	35.69
1920-1924.....	33.99
1925-1929.....	41.65
1930-1934.....	31.99
1935-1939.....	36.35

*4 years.

10 Year Averages

1856--1864.....	35.03
1865-1874.....	33.38
1875-1884.....	38.68
1885-1894.....	31.92
1895-1904.....	35.54
1905--1914.....	32.52
1915-1924.....	34.84
1925-1934.....	36.82

19 years

21 Year Averages

1856-1876.....	34.83
1877-1897.....	34.49
1898-1918.....	34.51
1919-1939.....	35.86

43 Year Averages	
1856-1898.....	34.79
1899-1941.....	35.03

NOTES

Peoria's yearly rainfall, page 14, has ranged about 30 inches, from 53 ins. in 1858 to 23 ins. in 1910.

The 5-year averages range about 10 inches, with both the lowest and highest since 1910.

The 10-year averages range about 7 inches, with the greatest beginning in 1875, and the least immediately following.

The four 21-year averages range less than 2 inches, and come alternately. With the last slightly the greatest.

The 43-year averages are practically alike.

PEORIA HOURLY RAINFALL, 27 YEARS: GROUPED IN FIVE RATES; NUMBER HOURS IN EACH

Average number hours (Av.): Greatest number (G): Least number per month (L): for each class.

Month	Trace			Light			Moderate			Mod. Hvy.			Heavy			Total			Thunderstorms		
	Av.	G	L	Av.	G	L	Av.	G	L	Av.	G	L	Av.	G	L	Av.	G	L	Av.	G	L
Jan.	52	101	3	35	78	5	6	17	0	0.4	3	0	0.1	1	0	42	92	5	0.4	6.0	0
Feb.	53	103	21	31	70	13	6	19	0	0.6	2	0	0	0	0	38	74	13	0.5	3.8	0
Mar.	56	136	31	41	77	12	14	31	4	1.9	8	0	0.7	4	0	58	87	18	5.3	23.8	0
Apr.	47	87	1	42	73	15	15	24	4	2.2	9	0	0.8	4	0	60	97	26	10.2	24.7	1.2
Apr.	34	83	15	32	65	8	14	36	4	1.7	8	0	1.9	11	0	50	97	15	18.5	55.0	2.1
June	26	53	10	22	43	5	8	15	0	2.9	7	0	2.1	6	0	35	57	8	21.5	49.2	7.1
July	19	30	7	18	48	7	8	16	2	2.5	6	0	2.3	5	0	31	74	9	20.1	39.2	3.8
Aug.	22	32	10	17	31	7	8	16	0	2.2	6	0	2.0	6	0	29	54	13	16.5	34.2	6.7
Sept.	26	53	6	27	86	7	12	25	2	2.7	8	0	2.1	9	0	44	121	19	14.7	61.5	0
Oct.	35	65	11	33	69	7	11	24	3	1.3	5	0	0.6	3	0	46	82	11	4.3	24.8	0
Nov.	47	78	25	34	85	4	11	28	0	1.5	6	0	0.5	5	0	47	117	4	1.9	8.0	0
Dec.	70	95	16	39	55	18	8	18	0	0.2	1	0	0.1	1	0	47	70	19	0.1	2.5	0
Annual..	487	621	429	371	573	294	121	183	93	20.1	32	12	13.2	24	2	527	760	458	114.0	185.5	60.9

Trace, less than .01 inch per hour; Light, .01 to .05; Moderate, .06 to .20; Moderately heavy, .26 to .35; Heavy, over .36 inch per hour. Hourly snowfall is estimated. Thunderstorms counted only from first to last thunder heard; their rain is included in the 5 rain groups. It will be noted that in the 27 years:- August has averaged the fewest total hours of rain and April the most. September rains have ranged from 19 to 121 hours September once had 61.5 hours of thunderstorms, which is more than half the average for an entire year.

Hail at Peoria, 1905 to 1941 incl.

Hail has been noted or reported in Peoria or vicinity 81 times in 37 years. Most occurrences covered only a small area, with slight or no damage. Three or four storms caused losses of \$1,000 or more. One is reported at \$10,000 damage in the country. Another destroyed \$8,000 in crops and property, nearly all of it in the greenhouse district within an area less than one-fourth of a township. Old settlers stated this to be the worst hail-storm in their section in 50 years.

Four years had no hail; none occurred in any December or January. February reports 2 and November 3 occurrences each. May with 23, April 16, and March 15 instances show the greatest numbers. The two most damaging occurred in May and June.

Sleet and Glaze at Peoria, 37 Years

A trace or more of sleet occurs here on an average of about five times per winter, and usually accompanies rain or snow. Probably a third of the sleet falls are so light that they give no inconvenience. Many of the others, up to moderate amounts, occur with snowfall and give little trouble. Dry sleet behaves on the ground like fine gravel or coarse shot, and makes highways somewhat slippery. Wet [partly frozen] sleet produces rather rough ice and creates highway hazard. Glaze [rain drops freezing on cold surfaces] gives smooth ice and makes travel dangerous for pedestrians or vehicles. Heavy freezing rain sometimes breaks many trees, wires, etc. Considerable falls of sleet or glaze have occurred about 18 times in 37 years. Of glaze storms probably seven or eight could be called severe. Of these, three or four have been outstanding in this section of Illinois.

SUMMARY OF 24,857 HOURLY OBSERVATIONS, 1936-38.
Taken day and night, at Peoria Airport Station

*(Form 1141-A)
(Jan.-Feb. 1936 missing)

* (Form 1141-A)
* (Jan.-Feb. 1936 missing)

Notes

The column at extreme left names conditions observed. Figures in other columns show percentage of total hours when named condition was present.

Note that the percent is given for each month, each season, each year.

Weather Conditions	Dec.	Jan.	Feb.	Winter	Mar.	Apr.	May	Spring	June	July	Aug.	Summer	Sept.	Oct.	Nov.	Autumu	Annual Mean
Light & Mod. Fog ..	22.4	23.5	16.7	20.9	12.2	10.7	9.5	10.8	6.7	3.4	7.0	5.7	8.9	9.9	6.1	8.3	11.4
Dense Fog	4.4	5.3	2.3	4.0	0.6	0.2	0.7	0.5	0.0	0.4	0.4	0.3	0.4	1.8	0.3	0.8	1.4
Thick Haze & Smoke, & Dust.....	1.1	1.3	0.4	0.9	0.8	0.3	0.0	0.4	0.2	*	0.1	0.1	0.4	0.8	0.9	0.7	0.5
Precipitation	12.6	15.7	15.4	14.6	8.8	12.6	6.7	9.4	5.2	2.8	4.3	4.1	5.9	6.1	7.0	6.3	8.6
Thunder Storms	0.0	0.0	0.3	0.1	0.5	0.4	1.6	0.8	1.3	1.6	2.5	1.8	1.0	0.4	0.1	0.5	0.8

Ceiling Heights, Percent of Observations

0-300 Ft.	10.3	9.6	5.6	8.5	1.4	0.9	0.6	1.0	0.1	0.3	0.3	0.2	0.4	3.0	1.4	1.6	2.8
301-600 Ft.	4.4	6.0	5.6	5.3	3.4	2.5	2.0	2.6	1.0	0.4	0.3	0.6	1.7	3.5	2.0	2.4	2.7
601-1000 Ft.	7.3	9.7	6.0	7.7	4.7	5.9	2.3	4.3	2.7	1.2	0.9	1.6	3.2	2.7	2.8	2.9	4.1
1001-2000 Ft.	7.3	11.3	14.3	11.0	7.4	6.4	5.0	6.3	5.0	1.3	2.9	3.1	4.7	4.8	7.6	5.7	6.5
2001-5000 Ft.	10.1	6.0	14.8	10.3	15.0	18.0	16.6	16.5	9.7	5.4	7.5	7.5	8.3	10.2	9.6	9.4	10.9
5001-9750 Ft.	7.1	5.7	7.6	6.8	7.1	8.3	8.2	7.9	5.7	6.0	5.4	5.7	6.9	5.8	5.2	6.0	6.6
Over 9750 Ft.	53.5	51.6	46.1	50.4	61.0	57.9	65.4	61.4	75.7	85.5	82.7	81.3	74.8	69.9	71.3	72.0	66.3

Visibility, Distances Percent of Time

0 to 1/8 Mi.	0.3	4.4	1.9	3.1	0.4	0.1	0.6	0.4	0.0	0.4	0.4	0.3	0.4	1.3	0.2	0.6	1.1
1/8 to 1/4 Mi.	3.2	3.8	1.3	2.8	0.6	0.5	0.4	0.5	*	0.1	0.3	0.1	0.1	1.1	0.3	0.5	1.0
1/2 Mi.	2.8	2.4	1.6	2.3	0.9	0.6	0.4	0.6	0.3	*	0.3	0.2	0.5	1.0	0.9	0.8	1.0
3/4 to 1 Mi.	6.8	8.1	5.5	6.8	4.4	1.8	1.1	2.4	0.6	0.4	1.6	0.9	1.5	3.8	2.3	2.5	3.2
1 1/4 to 2 inc.	14.2	15.7	7.9	12.6	7.4	3.8	2.3	4.5	2.0	1.6	2.8	2.1	4.2	6.2	5.4	5.3	6.1
2 1/2 to 6 inc.	37.4	33.2	38.2	34.6	26.6	22.6	14.7	21.3	13.0	14.8	23.0	16.9	22.9	23.3	32.1	26.1	24.7
7 to 12 inc.	30.3	27.8	33.1	30.4	47.2	49.1	64.0	53.4	63.9	64.0	53.8	62.2	52.7	50.6	48.8	50.7	49.2
13 and Over.....	7.3	4.6	10.4	7.4	12.5	21.4	16.4	16.8	20.2	18.7	12.9	17.3	17.8	12.6	10.1	13.5	13.8

The two top lines of this table, together, show that ceilings less than 600 ft. were present 5% of the total observed time. While 81% of the summer, and 66% of the entire year, had ceilings above 10,000 ft.; (this includes the time for both high clouds and no clouds at all).

Visibility is the horizontal distance one can see, in fractions of a mile. Note in the table that visibility at the airport was from 7 to 12 miles about half (49%) of the time, and from 2 to 6 miles another quarter the time. And that the best visibility (13 miles or more) was most frequent in April.

* Indicates less than .5 of 1%.

SNOWFALL: MONTHLY, SEASONAL, YEARLY

Winter	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Season	Year	Total
1884-85....	0	.5	5.7	18.0	10.0	.2	.1	0	34.5	1885	36.3
1885-86....	0	0	8.0	17.0	1.0	5.0	.4	0	31.4	1886	22.6
1886-87....	0	1.5	7.7	4.2	1.7	7.0	.5	0	22.6	1887	22.0
1887-88....	T.	.4	8.2	6.6	1.3	.5	0	0	17.0	1888	9.0
1888-89....	0	.3	.3	3.6	8.0	1.2	0	0	13.4	1889	15.8
1889-90....	0	3.0	0	1.0	6.0	3.0	0	0	13.0	1890	10.0
1890-91....	0	0	0	4.8	1.0	7.0	.6	0	13.4	1891	16.5
1891-92....	0	.6	2.5	8.5	1.7	1.3	0	0	14.6	1892	16.4
1892-93....	0	4.6	.3	8.9	16.5	.4	0	0	30.7	1893	39.8
1893-94....	0	4.0	10.0	5.0	8.0	.3	0	0	27.3	1894	14.0
1894-95....	0	.7	T.	7.0	2.5	4.0	2.0	0	16.2	1895	21.4
1895-96....	0	5.0	.9	1.3	12.0	1.5	3.0	0	23.7	1896	20.8
1896-97....	0	3.0	T.	9.0	5.2	4.7	.5	0	22.4	1897	25.4
1897-98....	0	.5	5.5	9.5	5.0	2.0	T.	0	22.5	1898	19.5
1898-99....	0	2.0	1.0	2.0	1.7	8.5	0	0	15.2	1899	17.2
1899-00....	0	T.	5.0	T.	26.5	1.4	.8	0	33.7	1900	29.8
1900-01....	0	.5	.6	1.0	10.8	.5	0	0	13.4	1901	16.0
1901-02....	0	0	3.7	6.3	2.1	.2	0	0	12.3	1902	9.2
1902-03....	0	T.	.6	7.0	4.5	0	0	0	12.1	1903	15.5
1903-04....	0	0	4.0	9.9	10.0	5.3	0	0	29.2	1904	28.4
1904-05....	0	0	3.2	10.5	12.8	.3	.5	0	27.3	1905	25.6
1905-06....	T.	T.	1.5	3.1	.1	13.2	0	0	17.9	1906	17.3
1906-07....	T.	.3	.6	8.5	1.4	7.9	.7	0	19.4	1907	21.0
1907-08....	0	T.	2.5	3.4	12.3	T.	T.	0	18.2	1908	19.7
1908-09....	0	.2	3.8	2.7	5.0	1.4	T.	0	13.1	1909	27.1
1909-10....	T.	T.	18.0	2.3	2.1	0	1.7	0	24.1	1910	7.7
1910-11....	T.	T.	1.6	11.3	7.2	.1	4.0	0	24.2	1911	31.6
1911-12....	T.	2.7	6.3	2.1	8.5	10.5	4.5	0	34.6	1912	25.6
1912-13....	0	T.	T.	7.3	9.5	5.3	T.	0	22.1	1913	25.2
1913-14....	.1	T.	3.0	8.6	12.2	1.1	T.	0	25.0	1914	36.3
1914-15....	0	T.	14.4	8.4	.1	4.1	0	0	27.0	1915	19.8
1915-16....	0	T.	7.2	3.9	3.1	4.0	0	0	18.2	1916	15.2
1916-17....	.3	T.	3.9	4.1	1.2	T.	T.	0	9.5	1917	13.3
1917-18....	.6	T.	7.4	16.9	.4	.2	T.	0	25.5	1918	24.5
1918-19....	0	T.	7.0	.3	9.8	4.4	0	0	21.5	1919	16.6
1919-20....	0	.9	1.2	8.5	.2	.3	8.2	0	19.3	1920	22.3
1920-21....	T.	.5	4.6	3.2	.2	T.	.1	0	8.6	1921	8.9
1921-22....	0	4.2	1.2	2.8	.6	1.3	0	0	10.1	1922	9.1
1922-23....	0	2.5	1.9	5.4	1.5	3.7	1.6	.1	16.7	1923	12.9
1923-24....	T.	T.	.6	5.0	5.9	7.9	.4	0	19.8	1924	26.0
1924-25....	0	.2	6.6	5.1	1.1	7.3	0	0	20.3	1925	24.1
1925-26....	2.8	4.8	3.0	4.8	3.0	18.2	7.4	0	44.0	1926	45.7
1926-27....	0	10.7	1.6	15.5	1.3	.3	.1	0	29.5	1927	23.7
1927-28....	0	T.	6.5	1.0	1.1	2.5	.1	0	11.2	1928	6.0
1928-29....	0	T.	1.3	10.1	4.1	T.	T.	0	15.5	1929	27.8
1929-30....	3.3	.8	9.5	14.1	.6	5.6	0	0	33.9	1930	25.3
1930-31....	T.	3.8	1.2	1.2	T.	10.3	T.	0	16.5	1931	17.1
1931-32....	0	.7	4.9	1.6	3.4	5.9	T.	0	16.5	1932	22.4
1932-33....	T.	5.6	5.9	.6	10.9	4.1	T.	0	27.1	1933	17.1
1933-34....	0	T.	1.5	.8	10.8	14.7	T.	0	27.8	1934	34.5
1934-35....	0	0	8.2	.1	1.2	.1	3.0	0	12.6	1935	15.4
1935-36....	0	.1	10.9	15.4	7.3	.9	3.0	0	37.6	1936	27.3
1936-37....	T.	.1	.6	4.7	2.0	1.2	T.	0	8.6	1937	12.8
1937-38....	T.	4.1	.8	6.3	7.0	T.	6.2	0	24.4	1938	21.0
1938-39....	T.	.6	.9	13.6	3.3	T.	T.	0	18.4	1939	25.0
1939-40....	0	T.	8.0	4.3	8.2	2.3	T.	T.	22.8	1940	16.4
1940-41....	0	1.3	0.3	9.1	3.3	5.1	0	0	19.1	1941	24.6
1941-42....	0	3.5	3.6	....	....	....	....	....	....	....	....
Mean	0.1	1.3	4.0	6.4	5.3	3.4	0.9	T.	21.2		21.1
Heaviest single storms	3.3 1929	9.7 1926	9.4 1909	14.4 1927	18.0 1900	9.6 1926	7.5 1920	0.1 1923	.....	.....	.....

Amounts for 1884 and 1885 are estimated from precipitation records of river observer. Record 1886 to 1905 by Dr. Brendel, co-operative observer.

The totals for both the winters and the years average practically alike, and range from 6 or 8 inches to about 45 inches. Six years and eight winters had more than 30 inches; and six years and three winters had less than 10 inches.

The earliest trace of snow was on October 5th, and the latest on May 9th; while measureable snow fell once on October 20th and on May 8th.

Some single storms in earlier years may have been heavier than those at foot of the above table. An unverified report mentions a "foot" of snow-fall April 6, 1874.

The storm of February 27-28, 1900, giving 18 to 20 inches in this section, is thought to be the heaviest in a century at Peoria.

In the winter of 1830-31 two storms, on December 29-30 and January 5th, are said by Drown's Record and Historical Review (pub. 1849) to have given 4 feet of snow, and blockaded all roads for 2 or 3 weeks. That does not seem impossible, for recent decades have had single falls of around 2 feet of snow in central Illinois.

Snow Covered Ground

Total days per month with 0.1 inch or more: Greatest depth occurring in month.
Season: Total days snow cover; Longest period (days) with continuous cover.

Season	Nov.		Dec.		Jan.		Feb.		Mar.		April		Season	
	Total days	Max. depth	Total days	Max. depth	Total days	Max. depth	Total days	Max. depth	Total days	Max. depth	Total days	Max. depth	Total days	Max. No. Consec. days
1884-85...	3	....	14	....	17	12.0	28	10.0	6	3.0	..	....	68	48
1885-86...	....	0.4	15	7.0	24	12.0	11	10.0	2	4.0	4	4.0	56	35
1886-87...	1	1.0	16	12.0	23	7.0	4	0.8	3	4.0	1	1.5	48	37
1887-88...	2	0.3	5	3.0	27	5.0	9	1.0	1	0.5	....	....	44	24
1888-89...	1	2.0	1	0.3	4	3.5	12	3.0	1	1.2	....	....	19	..
1888-90...	5	....	..	....	2	0.5	3	3.0	4	2.0	....	....	14	..
1890-91...	....	6.0	....	....	9	3.0	1	1.0	10	3.0	1	1.0	21	..
1891-92...	3	4.0	3	2.5	12	6.0	1	2.0	5	0.5	....	....	24	12
1892-93...	4	4.0	5	0.2	17	6.0	14	8.0	1	0.2	....	....	41	31
1893-94...	1	0.4	16	8.0	9	5.0	20	7.0	2	3.0	....	....	47	19
1894-95...	1	5.0	....	....	12	8.1	19	6.0	7	2.0	2	2.0	41	26
1895-96...	6	3.0	5	1.0	6	1.0	19	8.0	4	1.5	2	3.0	42	12
1896-97...	2	....	....	....	17	4.0	9	4.0	7	2.5	1	0.5	36	12
1897-98...	....	1.5	17	4.0	13	8.0	10	3.0	3	2.7	....	....	43	16
1898-99...	6	....	2	1.0	8	1.0	16	1.5	8	5.0	....	....	40	14
1899-00...	....	0.5	7	4.0	....	...	8	17.0	2	10.0	2	8.0	19	8
1900-01...	2	....	3	0.5	5	1.0	13	6.0	....	....	....	....	23	13
1901-02...	....	....	12	3.0	12	6.4	22	7.0	2	0.2	....	....	48	34
1902-03...	....	....	7	2.0	17	4.0	13	4.0	....	....	....	....	38	13
1903-04...	....	....	14	4.0	27	6.0	16	6.0	6	4.5	....	....	63	28
1904-05...	....	....	7	2.0	26	7.0	22	7.5	1	0.1	....	....	56	47
1905-06...	....	....	6	0.7	11	2.0	1	0.1	13	5.0	....	....	31	12
1906-07...	....	....	4	0.5	7	5.0	4	0.7	3	3.5	....	....	18	4
1907-08...	....	....	6	1.0	10	2.7	10	10.0	....	....	....	....	26	7
1908-09...	2	0.1	7	1.8	13	1.0	7	5.0	....	....	....	....	29	7
1909-10...	....	....	25	10.0	26	5.7	7	1.3	....	....	4	0.5	62	49
1910-11...	....	....	4	0.7	10	10.5	10	3.7	....	....	....	....	24	10
1911-12...	3	1.9	6	5.1	18	1.4	18	3.1	36	5.2	2	4.0	63	17
1912-13...	....	....	....	....	14	5.0	15	6.3	10	5.0	....	....	39	11
1913-14...	....	....	9	2.7	9	5.6	27	7.0	2	0.5	....	....	48	28
1914-15...	....	....	23	7.5	25	5.0	....	....	3	2.0	....	....	51	35
1915-16...	....	....	19	5.0	11	2.7	12	2.5	6	2.5	....	....	48	12
1916-17...	....	....	12	2.6	8	0.6	9	0.6	....	....	....	....	29	9
1917-18...	....	....	18	4.8	31	14.4	10	9.0	1	0.1	....	....	61	44
1918-19...	....	....	8	5.0	14	2.9	7	4.0	4	2.6	....	....	33	22
1919-20...	2	0.3	8	0.8	26	4.9	1	0.3	2	0.1	5	6.2	44	27
1920-21...	1	0.2	11	3.8	9	1.3	....	....	....	....	....	....	21	10
1921-22...	2	1.0	7	0.8	14	2.0	....	....	1	1.3	....	....	24	13
1922-23...	2	1.3	6	1.2	8	4.5	5	0.3	3	0.5	....	....	22	8
1923-24...	....	....	1	0.2	15	4.2	17	2.4	5	3.8	....	....	38	11
1924-25...	....	....	15	6.0	31	6.3	4	0.6	3	3.8	....	....	53	48
1925-26...	3	1.8	9	1.0	12	1.5	4	1.8	7	6.0	5	8.0	44	8
1926-27...	8	6.2	5	0.9	23	14.0	1	0.4	....	....	....	....	37	24
1927-28...	....	....	2	6.5	12	5.0	4	0.4	....	....	....	....	18	11
1928-29...	....	....	6	0.7	31	4.8	17	3.5	....	....	....	....	54	46
1929-30...	2	0.2	19	4.0	25	8.2	6	4.0	3	5.4	....	....	56	31
1930-31...	5	3.5	6	0.9	2	0.2	....	....	6	7.2	....	....	19	6
1931-32...	....	....	2	2.6	3	0.5	4	3.0	5	2.8	....	....	14	4
1932-33...	7	5.4	14	5.0	1	0.1	14	11.2	2	3.7	....	....	38	14
1933-34...	....	....	2	0.9	3	0.7	9	4.6	6	5.7	....	....	20	5
1934-35...	....	....	17	4.5	9	2.1	2	1.2	....	....	1	2.2	29	17
1935-36...	1	0.1	11	6.0	27	5.7	23	7.2	1	0.2	3	0.7	66	39
1936-37...	....	....	....	....	14	2.5	3	0.5	....	....	....	....	17	8
1937-38...	10	2.5	21	0.7	11	3.2	9	5.2	....	....	3	6.0	54	18
1938-39...	....	....	2	0.6	15	7.5	12	6.0	....	....	....	....	29	11
1939-40...	....	....	5	7.1	31	6.1	16	2.0	....	....	....	....	52	38
1940-41...	4	1.2	....	....	12	6.5	18	2.0	4	1.5	....	....	38	19
1941-42...	3	1.1	2	1.8	....	....	....	....	....	....	....	....	....	....
Average.	1.6	...	8.1	...	14.5	...	10.1	...	3.2	...	0.7	...	38.3	....

Duration of Snow Cover Peoria, 57 Years

For this the usual custom counts all days having a trace or more remaining on the ground. This Peoria avge. is 55 such days per year. But scattered thin patches of snow often cover only a small fraction of the surface, and provide neither protection for crops nor soil moisture for their future growth.

The count above uses only days having one-tenth in. or more average depth on the ground. Such days average as follows:

Nov. 1.6 days; Dec. 8; Jan. 14; Feb. 10; Mar. 3.2; April 0.7; winter averaging 38.3 days. Fourteen winters had more than 50 days of cover; and 14 had 30 days or more of continuous cover.

NOTES

This report deals with records, but they are incidental. The chief function of the Weather Bureau is forecasting.

In the early 1800s a group of widely scattered persons took daily weather observations; assembled and charted them for each day; compared the successive charts; and thus learned about storm movements.

After invention of the telegraph, observations could be wired immediately to a central office and charted, and forecasts made of approaching weather. Such a national service, organized in 1871, now has over 300 stations.

Early experience showed the need for knowing upper air conditions as well as those at earth's surface. Through several decades kites or balloons were used to carry up recording instruments, and helpful studies were made. But the high observations could not be obtained quickly enough for use in forecasting. In recent years airplanes carrying up instruments at about 20 stations are back in time for charting with ground observations, on study maps from which forecasts are made. The new "radio sonde" sent up by a small balloon, "ticks" back to a receiver at the ground, the story of conditions through which it is rising.

This opportunity to obtain prompt knowledge of temperature, moisture and air movements up through several miles of atmosphere has launched a fourth forward step in meteorology. Now the forecaster, instead of giving chief attention to the storm areas crossing the country, can give more attention to the broad air masses approaching or over the U.S., which do much to PRODUCE the storms. These broad deep masses, of dry polar air from Canada, or moist cool air from northern oceans, or dry warm air from over the mountains and plains of Mexico and the southwest, or warm humid air from the Carribeans and Mexican Gulf, all carry their original conditions for long distances. They encounter one another in a great variety of ways; and the regions or belts or surfaces where their borders happen to meet, are where most storms are developed.

The growth of air transportation adds much to the work of the Bureau. To protect all fliers as far as possible, several hundred special stations are linked up by teletype and telegraph and send hourly weather observations over the circuit day and night. From this close and constant nation-wide watch of weather developments, a half-dozen district offices broadcast airway weather forecasts every three hours, - with special warnings between if needed-. All airway pilots have radio head gear and can hear these broadcasts while in flight, and thus keep posted on the weather ahead. Also, any pilot in the air can call by radio at any time to any nearby airway station for information. Thus the weather hazard is being largely removed from flying.

The progress accomplished through the years in forecasting and public service; The character of further scientific studies under way; The possibilities clearly ahead in the work; present an inspiring picture to all who are acquainted.

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